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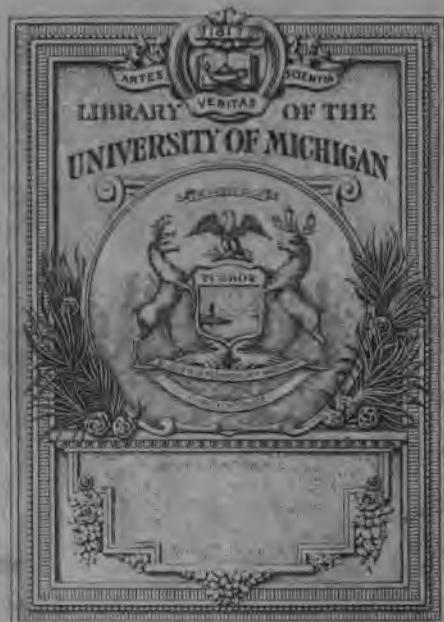
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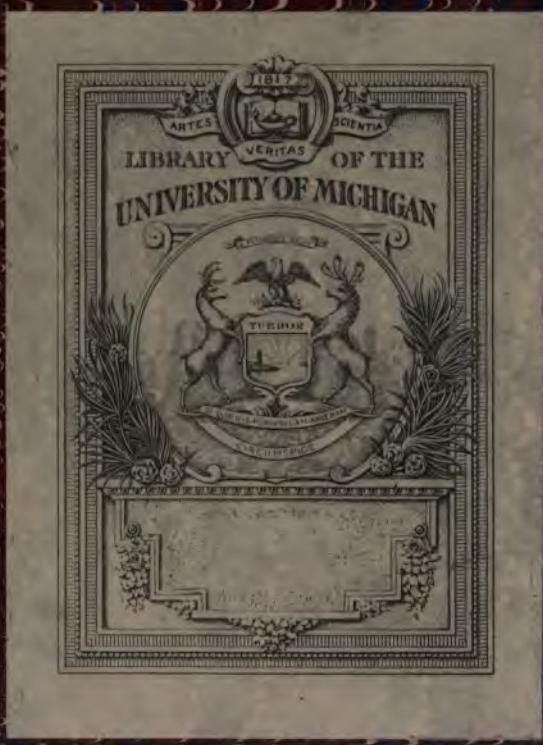
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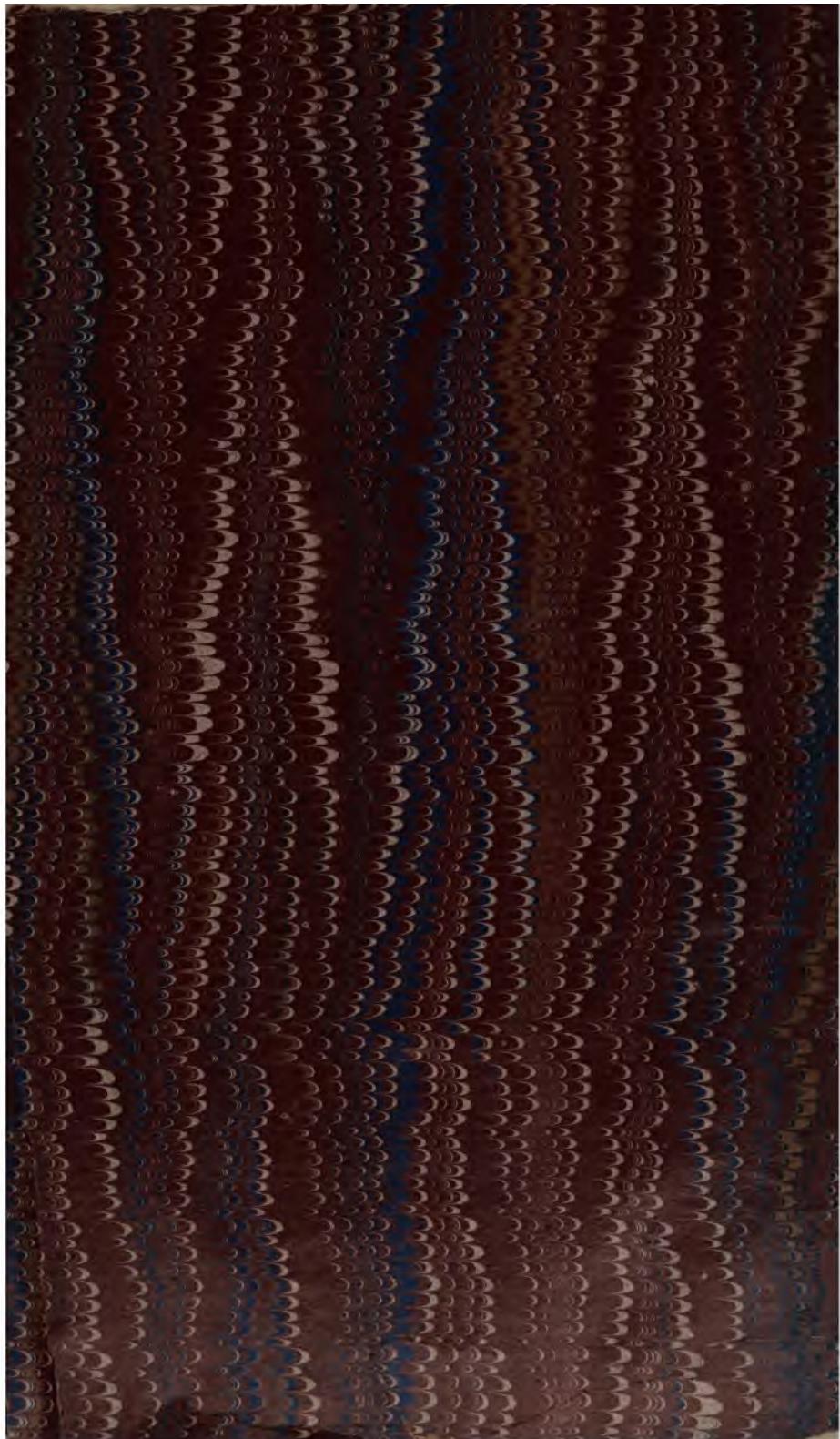
ANNUAL REPORTS
OF THE
SECRETARY
OF THE
INTERIOR.

1873-80.











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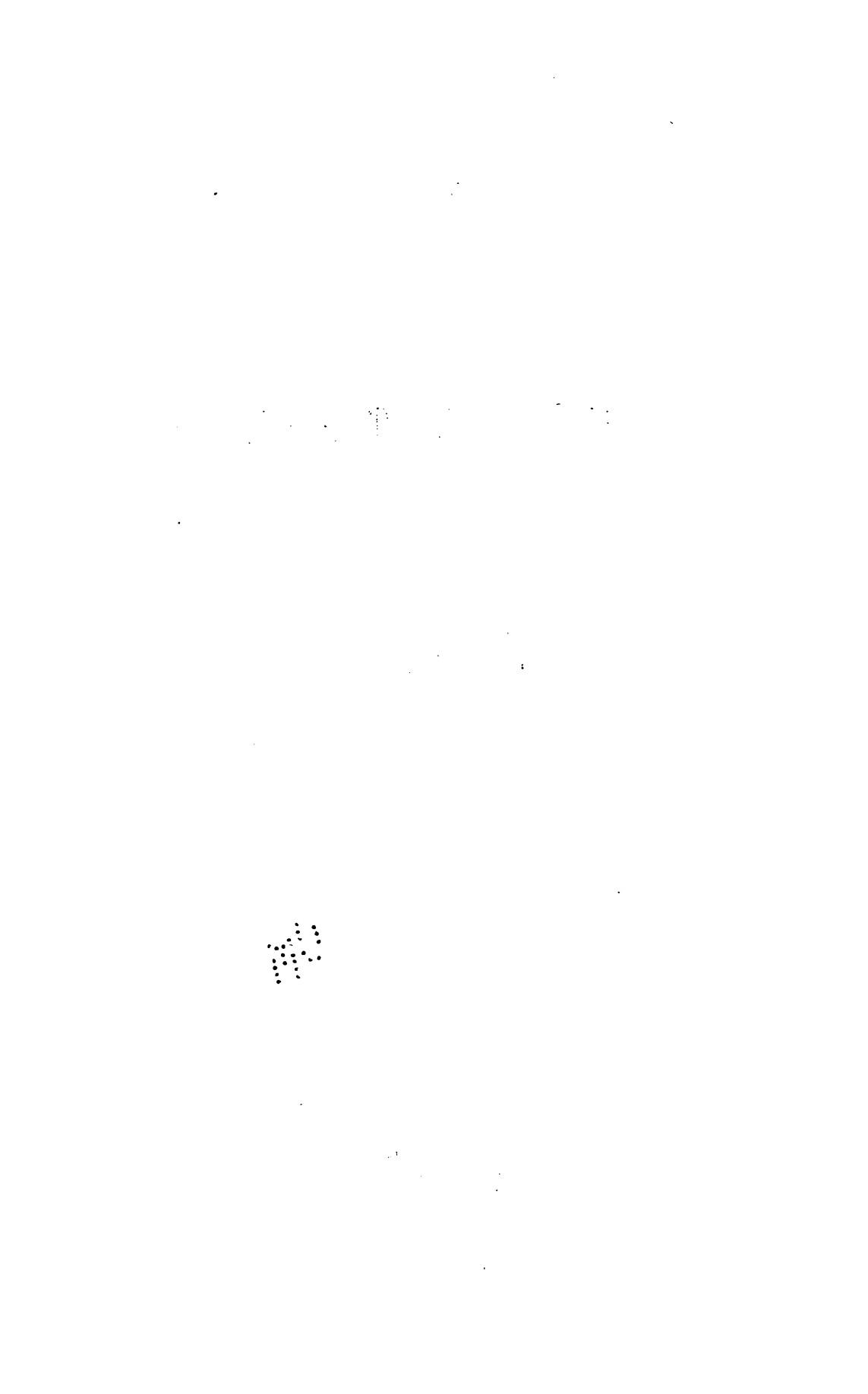


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Sec'y. of the Interior

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Oct 21 1873

REPORT

OR

THE SECRETARY OF THE INTERIOR.

DEPARTMENT OF THE INTERIOR,
Washington, D. C., October 31, 1873.

SIR: I have the honor to submit the following report of the operations of this Department during the past year, together with such suggestions as my experience has convinced me will promote the efficiency of the public service:

INDIANS.

The situation in the Indian service may be regarded as favorable and as a vindication of the propriety and practicability of the humane policy which was inaugurated at the beginning of your first presidential term, and which has governed the Department in the transaction of all business matters pertaining to the conduct of Indian affairs. That policy has for its main object and aim the restraint and elevation of the wild tribes of the frontier through firm but kind treatment. That progress has been made in the establishment of that policy, and in an improvement of the condition of Indians reached by it, is shown by the increased interest in educational matters, a growing willingness on the part of the Indians to engage in industrial pursuits, a desire for the division of lands, and an increase of stock and farm products.

THE INDIAN POLICY.

Preliminary to the annual exhibit of the affairs of the Indian service, so far as the control of the Department is concerned, and especially in view of certain occurrences of the past year in that service, and the very general discussion of the character and scope of the Indian policy, I deem it proper to indicate at this time more in detail what that policy was originally intended to accomplish, and the appliances through which it was sought to work.

The so-called peace policy sought, first, to place the Indians upon reservations as rapidly as possible, where they could be provided for in such manner as the dictates of humanity and Christian civilization require. Being thus placed upon reservations, they will be removed from such contiguity to our frontier settlements as otherwise will lead, necessarily, to frequent outrages, wrongs, and disturbances of the public peace.

On these reservations they can be taught, as fast as possible, the arts of agriculture, and such pursuits as are incident to civilization, through the aid of the Christian organizations of the country now engaged in this work, co-operating with the Federal Government. Their intellectual, moral, and religious culture can be prosecuted, and thus it is hoped that humanity and kindness may take the place of barbarity and cruelty. Second; whenever it is found that any tribe or band of Indians persistently refuse to go upon a reservation and determine to continue their nomadic habits, accompanied with depredations and outrages upon our frontier settlements, then the policy contemplates the treatment of such tribe or band with all needed severity, to punish them for their outrages according to their merits, thereby teaching them that it is better to follow the advice of the Government, live upon reservations and become civilized, than to continue their native habits and practices. Third, it is the determination of this policy to see that all supplies of every kind, whether of food or clothing, purchased for distribution to Indians, upon reservations and remaining at peace with the Government, are procured at fair and reasonable prices, so that the Indian meritng such supplies may receive the same without having the funds of the Government squandered in their purchase. Fourth; it is the purpose of the Government, as fast as possible, through the instrumentality and by the advice and assistance of the various religious organizations, and by all other means within its power, to procure competent, upright, faithful, moral, and religious agents to care for the Indians that go upon reservations; to distribute the goods and provisions that are purchased for them by the benevolence of the Government; to aid in their intellectual, moral, and religious culture, and thus to assist in the great work of humanity and benevolence, which the policy aims to accomplish. Fifth; it is the further aim of the policy to establish schools, and, through the instrumentality of the Christian organizations, acting in harmony with the Government, as fast as possible, to build churches and organize Sabbath-schools, whereby these savages may be taught a better way of life than they have heretofore pursued, and be made to understand and appreciate the comforts and benefits of a Christian civilization, and thus be prepared ultimately to assume the duties and privileges of citizenship. These are the aims and purposes of the peace policy, briefly stated, and must commend themselves to every right-minded citizen as in keeping with the duty of a powerful and intelligent nation towards an ignorant and barbarous race providentially thrown upon it for control and support.

It was not, of course, to be expected that so radical a change in the management of widely-scattered bands of roving Indians, whose only restriction hitherto had been their own capricious inclinations, and who roamed at will over vast regions of country, could be effected without resistance on their part and a show of force on the part of the Government. Such a result was never anticipated, even by the most sanguine

friends of the new policy, and the various impediments which have from time to time intercepted and obstructed the operations of the Indian Bureau have not, therefore, discouraged the reasonable hopes of final success which its active friends have always entertained. Satisfactory progress towards the accomplishment of the ends sought to be attained by this policy has already been made, fully justifying the hope that it will eventually achieve the end in view.

IMPEDIMENTS.

As the Department progresses in securing the adoption of this policy, the impediments are developed and modifications in details are suggested as necessary to give it greater efficiency and adaptability to the work in hand. Among these impediments is the practice, which has obtained for many years, of paying annuities to certain tribes, in money, in accordance with treaty stipulations, in lieu of goods and subsistence stores. It seems to be an unvarying result of such payments in money that the Indians are in worse condition in every respect than if they received payment in goods and supplies, and it appears in many cases that those receiving the most money are in the worst condition. Money seems to brutalize instead of civilizing, as they are ignorant of its value and unable to use it with any discretion. The result is, that in a short time after the receipt of the cash annuities they are often found in a state of great destitution. The recommendation of the Commissioner of Indian Affairs that such payments be hereafter made in goods and supplies, even if it be found necessary to modify the treaties to enable the change to be made, meets with my unqualified approval. In this connection I desire to refer particularly to certain moneys due to the Prairie band of Pottawatomies, as well as certain sums which are expected soon to be to the credit of the Kansas Indians, which, under existing treaty stipulations and laws, are required to be paid to said bands of Indians respectively. It is very desirable, in my opinion, that the sums here referred to should be held and regarded by the Government as funds for the civilization of these several bands of Indians; that it would be demoralizing, and therefore improper to pay said sums over to the Indians to be squandered.

I shall, therefore, present to the proper committees of each House of Congress, during the present session, bills providing that the sums of money here referred to be invested in Government bonds and placed to the credit of said Indians respectively, for the purpose of their civilization, to be used by the Commissioner of Indian Affairs for that object, both interest and principal, at such times and in such manner as the President of the United States may direct.

It is likewise detrimental to the substantial improvement of the race that they are compelled to hold their lands in common. Such community of interest operates as a premium upon indolence and unthrift, and places a discouraging burden upon those who are willing to work and who desire to acquire property. As fast as practicable, and when-

ever a disposition is manifested by an Indian to improve a separate tract of land and secure the comforts of a permanent home, a farm of suitable area should be set apart and secured to him for his exclusive occupancy and improvement, and he should be aided by donations of stock and farming implements, out of the annual appropriations for his tribe.

The first steps toward the permanent settlement of Indians in fixed homes is the establishment and rigid enforcement of regulations to keep them all upon reservations. This can only be done, at present, upon some of the reservations by a display of a sufficient military force near the reservation to punish all violations of such requirements. It is believed that many Indians who are subsisted by the Government persist in making forays upon white settlements and upon neighboring tribes, and then retreat to the refuge of their reservations where they can secure their spoils, and be fed and recuperated for fresh outrages. It will be found to be a measure of mercy to all if such Indians can be punished as they deserve.

INTERFERENCE WITH INDIANS ON RESERVATIONS.

Serious complaints are made to the Department relative to the presence, upon Indian reservations, of white men, who go there solely for the purpose of hunting buffalo, which are thus destroyed in large numbers. While I would not seriously regret the total disappearance of the buffalo from our western prairies, in its effect on the Indians, regarding it rather as a means of hastening their sense of dependence upon the products of the soil and their own labors, yet these encroachments by the whites upon the reservations set apart for the exclusive occupancy of the Indian is one prolific source of trouble in the management of the reservation Indians, and measures should be adopted to prevent such trespasses in the future, or very serious collisions may be the result. The Government has a two-fold object in confining Indians to reservations: to prevent their encroachments upon white settlers, and to isolate them as far as possible from association with white people. This cannot be accomplished if whites are allowed to trespass at will upon reservations. These remarks apply with greatest force to the so-called Indian Territory south of Kansas.

ENLISTMENT OF INDIANS.

The policy of enlisting friendly Indians as scouts and auxiliaries in punishing hostile tribes has obtained for some years in the Army, and Indians so serving have rendered valuable service, and received honorable mention in the reports of military officers, and have even been recommended as worthy of receiving certificates of merit for acts of special gallantry. It has been objected to such enlistments that they tend to intensify and perpetuate traditional inter-tribal feuds, and should, therefore, be avoided. Take for example the Rees and other tribes at the Fort Berthold agency, in the Territory of Dakota, in their relations

to the neighboring bands of Sioux. The valuable services of the former have been recognized by Generals Stanley and Crittenden, but these tribes have suffered in consequence by the depredations of the Sioux. I recommend a careful consideration of this subject as one of the utmost importance, but am not prepared to give it my approval, in view of the fact that its propriety is questioned by many of the most judicious friends of the Indian cause, whose opinions are entitled to great weight. If such enlistments are to be made, however, we should do all that is necessary to strengthen the tribes from which recruits are enlisted by liberal supplies and improved arms, thus enabling them not only to defend themselves more effectually, but to render more efficient service to the Government. The complaint is now made by some of the friendly tribes thus circumstanced, that the bounty of the Government is dispensed in direct proportion to the hostility of a tribe, and that those which have been friendly from their own voluntary choice are left for the most part to their own resources.

The Sioux Nation is almost completely surrounded by tribes that are really friendly to the Government, and at the same time bitterly hostile to the Sioux. If these friendly tribes could be liberally supplied with improved fire-arms and ammunition, the present supremacy of the Sioux might in a few years be destroyed with but little aid from the Army, and quiet would prevail over the vast extent of country now roamed by that powerful nation.

HUNTING PRIVILEGES OF THE SIOUX.

Attention is invited to the eleventh article of the treaty of 1868 with the Sioux Nation, granting them certain hunting privileges within the State of Nebraska, and without the bounds of their reservation. On account of the violation of the other provisions of that treaty by the Sioux, and the scarcity of game in the country referred to, the Government will, I think, be justified in abrogating that article, and I respectfully suggest such action.

REDUCTION AND CHANGE OF RESERVATIONS.

Satisfactory progress has been made within the year in the reduction of the area of existing reservations, in the exchange of reservations lying within the range of advancing settlements and railroad construction for other locations equally desirable for all purposes of Indian occupancy, as well as in bringing tribes upon reservations for the first time, and in the removal of other tribes to the Indian Territory. All this is the legitimate result of the working of the existing policy, and the efforts of the Department in that direction have been unremitting. Several important negotiations have been concluded during the year looking to the change in the location of tribes and the reduction in the area of reservations.

It will be found by an examination of these negotiations that by the treaty with the Crows their reservation has been reduced by 4,000,000

of acres. Their present treaty appropriation, amounting to \$130,000 per annum, expires with the present year, and by the terms of the negotiations under which they release the 4,000,000 acres of land above referred to, the Government will be required to pay them \$50,000 per annum, a reduction of \$80,000 per annum. In the negotiations with the Utes they relinquish between 4,000,000 and 5,000,000 acres of land, at an annual compensation of \$25,000. Their present treaty appropriation, amounting to \$20,000 per annum, expires with the present year. The net gains under the two negotiations in the annual expenditure of supporting these tribes amounts to \$75,000, as compared with the expenditures of former years. The terms of these negotiations provide for the payment of the respective amounts named in such articles as the President may direct, which is in conformity with a suggestion made in a previous portion of this report, that further payments of annuities in money, to Indians, should cease. These negotiations will be submitted to Congress for action. The result, if ratified by Congress, will be to release a large area of valuable agricultural and mineral land, thereby enabling our white settlements to advance and occupy a desirable portion of the public domain. In this work the Department is greatly indebted to Hon. Felix R. Brunot, president of the Board of Indian Commissioners.

INCREASING DIFFICULTIES OF THE SERVICE.

While there have been no extensive Indian depredations during the year there may have been an apparent increase in the number of petty raids and depredations. These have, without doubt, been magnified and attributed to a supposed failure of the policy, or its want of adaptation to the management of all the tribes. If there really be an increase of these occurrences it is clearly attributable to other causes, and is not unexpected. Our relative position towards the Indians is materially changed within the last few years.

The progress of population, through the instrumentality of railroads and other facilities for travel, has brought the Indians and our frontier population into close proximity over an immense area of country hitherto uninhabited by civilized man, and entirely occupied by the Indian and the buffalo. Where difficulties arise between Indians and whites in our frontier settlements we can no longer, as heretofore, mitigate or avoid the trouble by removing the Indians into a country remote from civilization. We are now compelled to solve the question of preserving order and security between the Indians and whites through a vast region of country, not less than four thousand miles in length by twenty-five hundred in width, extending from the extreme northern and northwestern limits of Washington Territory to the Gulf of Mexico, and from the line which separates the United States from the British possessions in the North to the line which separates the United States from the territory of Mexico in the extreme southwest. Everywhere and in all places throughout this extensive region we are in constant danger of

conflicts between our savage wards and our white citizens. The statement here made, if properly considered, will suggest to the reflecting mind how greatly increased are the difficulties of preserving peace, and securing everywhere the lives and property of our progressive and enterprising western settlers. We must look for and prepare to prevent, as far as possible, a clashing of interests where habits are so diverse.

Our civilization is ever aggressive, while the savage nature is tenacious of traditional customs and rights. The natural distrust of the Indians, embittered by generations of real or fancied imposition and wrong, coupled with the greatly increased facilities and temptations for hostile raids and petty outrages is probably more than Indian nature can withstand, and it will be difficult to avoid for a time an increase of such occurrences. This condition of things calls loudly for more efficient efforts to separate the Indians from the whites by placing them on suitable reservations as fast as circumstances will permit to avoid such collisions in the future.

THE MODOC WAR.

The most serious difficulty which the Indian Office and the Department have encountered during the year with any Indian tribe is that known as the Modoc war. As soon as I had reason to anticipate serious hostilities from the Modocs every possible effort was made by the Department and the Indian Bureau, co-operating with the War Department, to adjust the difficulty without bloodshed. So desirable was it to accomplish this end that it was deemed advisable to exhaust all possible measures calculated to secure peace. Unfortunately, however, so much excitement and so strong a desire for revenge were found to exist as to prevent the accomplishment of this object. It would be useless to attempt to trace here the causes which defeated these efforts and ended in the sad catastrophe with which the country is familiar. The final treachery of the Modoc chiefs, which culminated in the assassination of Maj. Gen. E. R. S. Canby, of the Army, and Rev. Edward Thomas, D. D., of California, one of the commissioners treating with him for a peaceful adjustment of the difficulties, and in the serious and dangerous wounding of A. B. Meacham, of Oregon, another member of the commission, rendered it necessary to inflict upon this tribe not only severe but exemplary punishment. This was accomplished, first, by the Army in totally subduing the Modocs and capturing most of the tribe, in the trial and conviction by court-martial, and finally in the execution of the most notorious and wicked leaders of the tribe. This being accomplished you deemed it advisable, if possible, to make this the occasion of furnishing to other Indian tribes an example calculated to deter them in future from the commencement of hostilities. To do this most effectually it was deemed best to remove the entire remnant of the tribe to this side of the Rocky Mountains, to break up its tribal relations and divide the members thereof among certain friendly Indians in the Southern superintendency. This work is now in process of accomplishment,

the entire body having been removed to the location indicated. It is now the intention of the Government to separate the members of this tribe and place them with different bands of Indians, taking care in doing this not to separate families, and to keep together, as far as possible, women and children whose husbands and male relatives were destroyed in the conflict.

The Indian is greatly attached to his tribal organization, and it is believed that this example of extinguishing their so-called national existence and merging their members into other tribes, while in reality a humane punishment, will be esteemed by them as the severest penalty that could have been inflicted, and tend by its example to deter hostile Indians in future from serious and flagrant insurrections.

The experience which the Modoc difficulty has furnished the Indian Office will, it is believed, enable that office to take measures calculated to prevent the recurrence of like difficulties under similar circumstances.

THE INDIAN TERRITORY.

The condition of the so-called Indian Territory is practically unchanged during the year, although progress has been made in the permanent location of additional tribes therein. The lawless condition of the Territory, the growing insecurity of life and property, and the manifest indisposition of the tribes there resident to accept voluntarily any improved form of government whereby existing difficulties might be avoided, would seem to call for some legislation to effect an improvement in the status of the Territory. It is to be regretted that the Ocmulgee constitution, with the amendments heretofore suggested by you, was not adopted by the council of tribes to whom it was submitted, as I am well convinced that such action on their part would have been attended by the most beneficial results. Recent information induces the belief that the opposition heretofore offered to those amendments by the Indians will be withdrawn at the next meeting of their council, and that the constitution will be adopted as amended. If it shall not be adopted, and Congress shall not deem it advisable to erect a territorial government within the Indian Territory, I trust that the necessary legislation may be obtained to at least provide for the organization of a court or courts therein, under the jurisdiction, so far as the appointment of the judicial officers is concerned, of the Federal Government. The necessity which now compels the resort to a court in an adjoining State involves a burden of expense to litigants as well as to our Government which operates as almost a bar to justice, and produces a condition of anarchy throughout the Territory under which life and property are in jeopardy to an extent almost equal to that in territory occupied by tribes making no pretense of civilization.

MISSION INDIANS OF CALIFORNIA.

Attention is invited to the condition of the so-called Mission Indians of Southern California, as set forth in the interesting report of the

special agent sent to investigate their condition, and which accompanies the report of the Commissioner of Indian Affairs. Their past history and present condition, the treatment they have received from their white neighbors and from the Government, offer the strongest reasons for legislation in their behalf that they may be enabled to secure to themselves homes and the protection of the law.

CO-OPERATION OF THE WAR DEPARTMENT, ARMY, INDIAN COMMISSIONERS, ETC.

I take pleasure in being able to say that this Department has had during the past year the cordial and earnest co-operation of the Secretary of War and the officers of the Army in carrying out its policy of dealing with the various Indian tribes. This, with the valuable aid and assistance which has been rendered by the Board of Indian Commissioners, and especially its President, Hon. Felix R. Brunot, and the various religious organizations by whom the Indian agents of the Government are selected, has materially aided the Department in its difficult and complicated labors. A continuance of this work, sustained by the other branches of the public service just referred to, will, I have no doubt, in a few years, result in greatly improving the moral and physical condition of the Indians, and in giving security to our frontier settlements from Indian depredations, as well as in laying a permanent foundation for the progress of our various Indian tribes in the pursuits of peace and civilization.

LANDS.

During the fiscal year ending June 30, 1873, public lands were disposed of as follows:

	Acres.
Cash sales.....	1,626,266.03
Located with military warrants.....	214,940.00
Taken for homesteads.....	3,793,612.52
Located with agricultural-college scrip	653,446.41
Certified to railroads.....	6,083,536.57
Certified to wagon-roads.....	76,576.82
Approved to States as swamp.....	238,548.65
Certified for agricultural colleges.....	10,223.29
Certified for common schools.....	76,909.17
Certified for universities.....	51,228.69
Certified for seminaries.....	320.00
Approved to States for internal improvements	190,775.76
Indian scrip locations.....	14,222.96
 Total	 13,030,606.87

This quantity exceeds that disposed of during the previous year by 1,165,631.23 acres.

The cash receipts were \$3,408,515.50, a sum greater by \$190,415.50 than that received the previous year.

The surveys amounted to 30,488,132.83 acres, an increase on the quantity surveyed the previous year of 1,037,193.28 acres. The total area of the land States and Territories is 1,834,998,400 acres, of which 616,554,895 acres have been surveyed.

The Commissioner states that the arrearages of work in his office have been diminished, and that its business is now, in most of its branches, in an advanced condition. This business is, however, steadily increasing *pari passu* with the tide of immigration to the frontier; and to keep it in a satisfactory state will require a thorough re-organization of the clerical force. I would respectfully and earnestly invite the attention of Congress to the Commissioner's suggestions on this head, as well as to those concerning the expediency of repealing the pre-emption laws and requiring settlers on the public lands to obtain title thereto under the homestead laws only.

The report of the Commissioner contains much valuable information; the principal rulings of the office and of the Department during the last fiscal year; circulars to carry into effect recent legislation relating to the public domain; all showing this important branch of the public service to be wisely managed by its energetic and capable head.

MENNONITES OF SOUTHERN RUSSIA.

I desire to invite the attention of Congress to a request from a colony of Mennonites, now and for several generations residing in Southern Russia, near the shores of the Black Sea and the Sea of Azov, for a modification of the existing land laws in certain particulars, to enable them to settle upon our public domain in a compact colony.

By a decree of the Russian government this people, numbering between forty thousand and fifty thousand persons, have been deprived of certain immunities which they have enjoyed ever since their first settlement in Russia, and the granting of which had originally induced them to leave their former homes in Prussia and settle in their present place of abode.

It is their desire to come to the United States and to occupy a portion of our public lands in a compact body, with no strangers to their religious faith within the exterior bounds of their possessions. Such exclusive occupancy they deem essential to enable them to carry out their peculiar system of farming, which to some extent involves a community of interest in and occupancy of the lands; and they also wish to avoid, as far as possible, the presence of any disturbing elements in their immediate neighborhood.

The deprivation of the immunities heretofore enjoyed by them does not take effect until the expiration of ten years from June, 1871, the date of the imperial decree. Within that time it is their desire to dispose of their property in Russia, and remove to a country where they may enjoy civil and religious liberty; and they have selected the United States as a place where they can most fully realize such freedom.

In order, however, to enable them to obtain possession of lands in a

compact body, some concessions must necessarily be made from the present requirements of the land laws. I would respectfully suggest that the Secretary of the Interior be authorized to withdraw from sale or entry such lands as they may desire to occupy, for a term of years long enough to enable them to emigrate to this country and settle thereon, and to dispose of such lands to those persons among the emigrants who shall make the proper entry or purchase thereof in accordance with existing laws. Should they desire to settle within railroad limits, the authority should enable the withdrawal, in like manner, of the alternate sections belonging to the Government. It is possible that the entire body of emigrants may not desire to locate in one colony, but would prefer the selection of two or more colonies or locations. It would be well, therefore, to confer such discretion on the Secretary of the Interior as would enable him to meet their views in that regard. The entire area they will probably require will be about 500,000 acres.

POSSESSORY RIGHTS OF BRITISH SUBJECTS IN THE TERRITORY CONFIRMED TO THE UNITED STATES BY THE DECISION OF THE EMPEROR OF GERMANY.

The Secretary of State has called my attention to a communication from Sir Edward Thornton, the British minister, who, under instructions from his government, has asked the consideration of the case of those persons, subjects of Great Britain, who had settled upon the islands between the continent and Vancouver's Island, which were confirmed to the United States by the decision of the Emperor of Germany. And the Secretary of State, after calling the attention of the Department to this subject, has inquired whether he may be justified in saying to the British minister that this Department will be prepared to recommend to Congress any legislation on this subject at the approaching session, and also to ask, in case any legislation will be recommended, that, if there be no objections, he may be informed of the provisions which Congress will be asked to enact into a law.

The third article of the treaty of June 15, 1846, above referred to, is in the following words :

In the future appropriation of the territory south of the forty-ninth parallel of north latitude, as provided in the first article of this treaty, the possessory rights of the Hudson's Bay Company, and of all British subjects who may be already in the occupation of land or other property lawfully acquired within the said territory, shall be respected.

The construction placed upon this article of the treaty by those most familiar with its history is that the possessory rights of the Hudson's Bay Company, and all British subjects who were in the occupation of land or other property within said territory at the date of the treaty, are the only possessory rights to be respected. I have concluded to follow this construction.

I have therefore advised the Secretary of State that this Department

will be prepared to recommend to Congress the passage of a law providing in substance as follows:

First. For the appointment of a commission to make, and report to the Secretary of the Interior, a list of the British subjects within said territory at the date of the treaty of June 15, 1846, with a description of the lands actually occupied by each at that time.

Second. That such parties shall have one year from the date of the filing of such report with the Secretary of the Interior in which to enter and pay for the lands so occupied by them, at the ordinary minimum price per acre where the lands are outside of railroad limits, and at double minimum price where the lands are within railroad limits. The entry to be according to legal subdivisions so as to include the improvements of occupants, and where two or more parties shall have improvements on the same smallest legal subdivision, that they may be entitled to make joint entry.

Third. That in case entry and payment are not made within one year from the time when the report of the commission is filed in the office of the Secretary of the Interior, all possessory rights under the treaty shall be considered forfeited, and the lands shall thereafter be deemed and treated as part of the public domain, to be disposed of as other public lands.

I have therefore respectfully to recommend the adoption by Congress of some measure which will embody the principles contained in my communication to the Secretary of State herein referred to.

Should Congress be of opinion that the construction of the third article of the treaty of 1846 which I have adopted is incorrect, and that it should be so interpreted as to embrace the possessory rights of all persons who were occupants of land or other property, lawfully acquired, at the date of the award of the Emperor of Germany, before referred to, it will be in their power to enlarge the scope of the measure which I here recommend so as to include this class of persons.

If grave doubts are found to exist in regard to the interpretation of this article, and if, in view of such doubts, it shall appear to Congress that some equitable provision should be made for such persons as may have acquired possessory rights within the territory after the date of the treaty of 1846, it will be in the power of Congress to make such provision for these equitable rights as in its wisdom may be deemed advisable.

Should such doubts arise, it may be proper, if any legislation is had for the protection of the equitable rights of persons coming into the territory after the date of the treaty, that it be limited so as to prevent any occupant of this class acquiring more than one quarter-section of land.

THE GROWTH OF TIMBER ON THE PUBLIC DOMAIN.

On the 3d of March last an act was approved entitled "An act to encourage the growth of timber on western prairies," the first section

of which provides, "That any person who shall plant, protect, and keep in a healthy, growing condition, for ten years, forty acres of timber, the trees thereon not being more than twelve feet apart each way, on any quarter-section of any of the public lands of the United States, shall be entitled to a patent for the whole of the said quarter-section, at the expiration of said ten years, on making proof of such fact by not less than two credible witnesses: *Provided*, That only one quarter in any section shall be thus granted."

The Commissioner of the General Land-Office, in preparing rules and regulations under the sixth section of the above act, in order to carry its provisions into effect, refused to permit more than one entry of a quarter-section to be made by any one person.

It is claimed, on the other hand, that this act permits any person to make entry of as many quarter-sections as he sees fit.

While it may not be perfectly clear that the ruling of the Commissioner is according to the true legal interpretation of the act, it seems to me that it is in accord with the general purpose of Congress in disposing gratuitously of the public domain, and that to allow a contrary interpretation would be to encourage the incumbrance of the public domain, by entries of this character to a large amount, by persons whose circumstances enable them to make the necessary expenditures, whereby the public lands would be withdrawn from the free and easy settlement now secured to persons of moderate means; and that, in this manner, considerable inconvenience and injustice to pre-emptors and homestead-settlers would necessarily ensue.

I have deemed it best, therefore, to sustain the construction put upon the act by the Commissioner of the General Land-Office, and, in this manner, to invite the attention of Congress to the subject, so that, if deemed necessary, they may declare distinctly the right of any one individual to make as many locations as he sees fit under the aforesaid act.

PATENTS.

During the year ending September 30, 1873, there were filed in the Patent Office 20,354 applications for patents, including re-issues and designs; 283 applications for the extension of patents; and 519 applications for the registering of trade-marks. Twelve thousand nine hundred and seventeen patents, including re-issues and designs, were issued, 235 extended, and 965 allowed but not issued by reason of non-payment of the final fee; 3,274 caveats were filed, and 475 trade-marks registered. The fees during the same period from all sources amounted to \$701,626.72, and the total expenditure to \$699,449.69, making the receipts \$2,177.03 in excess of the expenditure. The appropriation asked for the fiscal year ending June 30, 1875, is \$693,500.

The excess of receipts over expenditures for said year is not, nomi-

nally, so great as during previous years. This is explained by the following statement of the Commissioner:

The publication of the Official Gazette of the office requires an annual expenditure of \$40,000, but a small portion of which is at present returned to the office by subscription. It has been deemed advisable to publish an edition of 10,000 copies, although less than half of that number are now distributed. Subscriptions, however, are being constantly received, and the back numbers are invariably called for. The Commissioner expresses his conviction that the entire edition will be exhausted within a few years. During said year the cost of printing the current drawings for the office has been paid from the appropriations made for the Patent Office. Previously that expense had been defrayed from appropriations made for the Government Printing Office. This expense, amounting to \$40,000 annually, has thus been added to the regular expenditures of the office; but it is, in effect, only a transfer from appropriations made for the Government Printing Office to those for the Patent Office. The sum of \$60,000 has been expended in the reproduction of old drawings, but this amount appears to be no part of the current expenses of the office. The Commissioner states that in a few years all of the old drawings will be reproduced in such quantities as will supply the future demand for them. He considers the amount thus expended well invested, not only financially, but with reference to the intelligent advancement of the manufacturing interests of the country. The drawings are being sold for more than their actual cost, and it is believed that a greater amount will eventually be received from their sale than has been expended for their reproduction.

The items above referred to amount to \$140,000, which sum has been added, during the year ending September 30, 1873, to the regular current expenses of the office in previous years, and has absorbed almost the entire amount of the excess of receipts over expenditures which would otherwise have existed.

The Commissioner again earnestly invites attention to the great want of additional room for the proper transaction of official business, stating that it is utterly impossible to properly classify the work of the office, in order to insure its being economically and properly done, in the present crowded state of the files, records, and exhibits.

PENSIONS.

There are now borne upon the pension-rolls the names of 445 widows of soldiers in the revolutionary war, a decrease of 26 since the last annual report. The names of 1,105 widows and children of soldiers who served in the wars subsequent to the Revolution and prior to the late rebellion, excepting the war of 1812, are borne on the rolls, being 52 less than the preceding year.

During the year ending June 30, 1873, there were examined and allowed 6,422 original applications of soldiers for invalid pension, at an aggregate

annual rate of \$112,344.50; 20,946 applications of soldiers for increased pension, at an annual aggregate rate of \$920,930.25; and 251 applications of invalid pensioners for restoration to the rolls, at an aggregate yearly rate of \$12,868.92. The number of claims for increased invalid pensions of soldiers is greatly in excess of previous years, owing to the liberal provisions of the act of June 8, 1872; 15,505 claims, or more than three-fourths of the number above named, having been admitted under said act. During the same period 3,949 original pensions to widows, orphans, and dependent relatives of soldiers were allowed, at an annual aggregate rate of \$520,802.07; 545 applications of the same class for increase of pension were admitted, at a total yearly rate of \$20,108.87; and 73 applicants of that class were restored to the rolls, at an aggregate annual rate of \$8,034. The whole number of Army claims for pensions, original, increase, and restoration, and exclusive of those of the war of 1812, which were allowed during the said year, was 32,186, and the annual amount of pension thus granted was \$1,896,088.61. At the close of the last fiscal year there were borne on the rolls the names of 99,804 invalid military pensioners, whose yearly pensions amounted to \$9,627,240.09; and of 112,088 widows, orphans, and dependent relatives of soldiers, whose annual pensions amounted to \$13,962,764.39; making the aggregate number of Army pensioners 211,892, at a total annual rate of \$23,590,004.48. The whole amount paid during said year to invalid military pensioners was \$10,564,825.51, and to widows, orphans, and dependent relatives, \$15,388,644.75; a grand total of \$25,953,470.26, which includes the expenses of disbursement.

During the same year there were admitted 129 new applications for invalid Navy pensions, at a total yearly rate of \$15,421; 239 applications of the same class for increase of pension, at an annual aggregate rate of \$11,086; 1 application of that class for restoration to the rolls, at an annual rate of \$48; 124 original applications of widows, orphans, and dependent relatives of those who died in the Navy, at an aggregate yearly rate of \$20,184; 31 applications of the same class for increase of pension, at a total annual rate of \$1,500; and 6 applicants of that class were restored to the rolls, at an aggregate annual rate of \$1,200. The total number of Navy claims, original, increase, and restoration, admitted during said year, was 530, the annual pension thereby granted amounting to \$49,439. At the close of said year there were borne on the rolls of Navy pensioners the names of 1,430 invalids, whose yearly pensions amounted to \$150,537.75; and of 1,770 widows, orphans, and dependent relatives, at a total yearly rate of \$280,550, making the whole number of such pensioners 3,200, at an aggregate annual rate of \$431,087.75. The total amount paid during the last fiscal year to Navy invalid pensioners was \$160,971.98, and to widows, orphans, and dependent relatives, \$302,936.71, a total amount of \$463,908.69.

Prior to June 30, 1873, 39,331 claims of survivors and of widows of

soldiers in the war of 1812 had been received, of which number 2,780 were filed during the last fiscal year. There were pending on the 30th day of June, 1872, 11,580 claims of this character, which, added to the number received during the succeeding year, makes a total of 14,360 claims which were before the office for adjudication during said year. Of these there were allowed during the year 3,186 claims of survivors, at a total yearly rate of \$305,856; 2,242 claims of widows, at an aggregate yearly rate of \$215,232; 16 claims of survivors and 6 of widows for restoration, at a total annual rate of 2,112; making the total number of claims of this character allowed during said year, 5,450, and the annual amount of pensions thus granted, \$523,200. During the same period there were rejected 3,933 claims of survivors and 2,082 of widows a total of 6,015 claims. On the 1st instant there were pending 2,895 claims of this description, more than half of which are believed to be without merit, and will probably be rejected. The total amount paid during the year to survivors of the war of 1812 was \$2,078,606.98, and to widows, \$689,303.69, a total amount of \$2,767,910.67, including the expenses of disbursement.

The number of original pensions of all classes granted during the past fiscal year was 16,405. During the same period there were dropped from the rolls, from various causes, 10,223 names, leaving a net addition to the pension-rolls during said year of 6,182 names. The whole number of pensioners of the Government on the 30th day of June, 1873, was 238,411, whose annual pensions amount to \$26,259,284.23. The amount paid during said year for pensions of all classes, including the expenses of disbursement, was \$29,185,289.62, being \$984,050.38 less than the amount paid during the preceding year.

Three hundred and forty bounty-land warrants were issued during the year for 52,160 acres, being 15,880 less than the number of acres issued for the preceding year. During the same period 1,398 persons availed themselves of the benefits of the act of June 30, 1870, providing for artificial limbs and apparatus for resection, or commutation therefor, of whom 1,332 preferred the latter.

On the 30th day of June, 1873, there were on file, unadjusted, 32,054 claims for invalid pension, 29,615 claims of widows, orphans, and dependent relatives, and 3,004 claims of soldiers and of widows of soldiers in the war of 1812, making a total of 64,673 unadjusted claims, a decrease of 17,845 since the last annual report.

The Commissioner, in his report, refers to certain defects in the system which has obtained with respect to the establishment of claims for pension, and expresses the opinion that, until such defects are remedied by new legislation, there is no adequate security to the Government against dishonest claimants. The work of investigating frauds, committed by dishonest claimants and attorneys, has continued during the year, with its customary good results. The direct saving to the Government effected by these investigations is many times greater than the sum

expended in making them, and sound policy dictates that they should be continued. While the efforts made by those charged with the duty of detecting frauds already committed are generally successful, it is apparent that they are powerless, under the present system of establishing pension-claims, to prevent their commission.

The act of March 3, 1873, provided for the appointment of a "duly qualified surgeon as medical referee," and of such other "duly qualified surgeons (not exceeding four)" as assistants to such referee. This legislation supplied a want which had long existed in the administration of the office. Inasmuch as in a large proportion of claims for invalid pension the question of title thereto is purely of a medical character, it had been found necessary in past years to organize a medical division in the office, but no direct provision therefor was made by law until the passage of said act. That division is now organized upon a legal basis, and is in the charge of a chief whose official position is established by law. An accomplished surgeon, who had previously been in charge of the medical division, was appointed medical referee, and his four assistants were selected from among those of the clerical force of the office who, upon a competitive examination, conducted with reference to the special qualifications required, were found to be the most competent for such positions. The certificates of the examining surgeons of pensions constitute a very important feature of claims of invalids, inasmuch as they prescribe in a great measure the rates of pension allowed. In order to guard against an improper expenditure of the public money, on the one hand, and to insure justice to claimants on the other, it is essential that such certificates should be the result of the best medical judgment attainable, and that they should be analyzed and corrected by the office, so as to secure proper and uniform rating of pensions. The roster of examining surgeons is constantly undergoing changes with a view to greater efficiency, and its members have been thoroughly instructed in respect to their duties. An evidence of the efficiency with which the medical division has labored in this direction is shown by the fact that only about five per cent. of the certificates of examination are at present returned for correction to the surgeons making them, whereas two years ago about forty per cent. thereof was returned for that purpose. The improvement in the character of such certificates, and the careful and intelligent supervision of them by the medical division, has resulted in a more uniform and equitable adjudication of claims for invalid pension than has ever been attained hitherto in the practice of the office.

The Commissioner suggests that the law in relation to pensions of Indians be amended in certain particulars, so as to enable the office to do justice to a class of persons whose equitable claims upon the bounty of the Government have been long delayed.

Owing to recent modifications of the pension laws, which compelled the re-adjustment of an unusual number of claims, the work of the office

has been largely increased, and the biennial examination of pensioners, made in September last, also entailed upon its clerical force much additional labor. Some delay has thus been caused in the ordinary routine business of the office, but it is confidently believed that the force now employed will soon be equal to the demands made upon it. The biennial examinations above referred to were so recently made, that, at the date of the Commissioner's report, sufficient returns therefrom had not been received upon which to base an opinion as to the probable result with respect to the annual pension appropriation.

The Commissioner represents the necessity for a re-organization of the office by creating heads of divisions, whose duties shall be defined by law, and whose compensation shall be commensurate with the responsibility imposed upon them.

The amount that will probably be required for the pension service during the next fiscal year is \$30,480,000. The same amount was asked for and appropriated for the current fiscal year. There would have been a considerable decrease in the amount now asked for had it not been for the new legislation contained in the act of March 3, 1873. Under that act widows of officers are entitled to additional pension on account of minor children by such officers, and a single minor child of a deceased soldier is also entitled to additional pension. In both of these cases, hitherto unprovided for, arrears of the additional pension are due since July 25, 1866. A considerable sum will also be required to satisfy claims on account of permanent specific disabilities for the increased rates provided for in said act.

EDUCATION.

During the past year this office has steadily pursued the course of work laid down for it by law. The library of the Bureau has received important accessions, especially of foreign educational reports and literature. About 7,000 volumes and 36,000 pamphlets, published by the Bureau, have been distributed during the past year.

In accordance with the expressed wishes of the Department of State and of the General Director of the Vienna Exposition, the Bureau of Education, during the winter of 1872-73, took measures to procure and forward to the exposition specimens of school-books, charts, school furniture, educational reports, catalogues of libraries, and other appropriate matter. These were duly exhibited in Group XXVI of the exposition, with additional material collected by similar efforts; and the collection thus gathered in Vienna has, during the past summer, been an object of profound interest to the great assembly of educators, scientists, and intelligent observers who visited that city. As a recognition, in the words of the awards, of its "distinguished services in the cause of education, and for important contributions to the exposition," a grand diploma of honor (the highest prize given) was awarded to the Bureau.

Three other grand diplomas of honor, viz, to the State of Massachusetts, the city of Boston, and to the Smithsonian Institution, respectively, as well as many medals and diplomas of merit to various cities of the United States for their contributions to the educational department of the exposition, were awarded.

The Commissioner recommends an increase of the permanent force of the office commensurate with the increasing amount of work to be done, an appropriation for book-cases and record-cases, additional funds for the publication of circulars of information to meet the increasing demand for the same, the passage of a law requiring annual reports respecting the condition of education in the Territories for the information of Congress and the public, the setting apart of the net proceeds of public land-sales in behalf of public instruction, and the printing of a larger number of his annual report.

CENSUS.

The report of the Superintendent of the Census details the work of that office during the past year, in supervising the printing and publication of the voluminous reports of the ninth census; in adjusting under the act of Congress approved March 3, 1873, the accounts of assistant marshals at the eighth census in the Southern States; in conducting current correspondence; and in placing the records and files of the office in shape for use and reference at future censuses. It will be seen that the three quarto volumes, comprising the complete reports of the ninth census, as well as the compendium provided for by the concurrent resolution of Congress passed on May 31, 1872, have issued from the press since the date of the last annual report of this Department. Eight hundred and twenty-eight accounts of assistant marshals at the eighth census, which have for twelve years been suspended for proof of loyalty, have been adjusted, in a total sum of \$164,341.53, and forwarded to the Treasury Department for payment. The force of the office has meanwhile been rapidly reduced. Now that the last of the great body of manuscript record brought into the Department by the enumeration of 1870 has been arranged, one clerk, it is believed, will suffice, as in the interval between the eighth and ninth censuses, to conduct all the correspondence and perform all the duties relating to this branch of the public service.

At the date of my last annual report the duties of the Superintendent of the Census under my appointment were discharged by the Commissioner of Indian affairs, Hon. Francis A. Walker, who had held the office of superintendent prior to his appointment to the Indian Bureau. On the resignation of Commissioner Walker, February 1, 1873, to accept a position in private life, I requested him to continue his charge of matters relating to the census, in order that the continuity of plan and procedure might not be unnecessarily interrupted. In compliance with this invitation Mr. Walker duly qualified, and has continued to act as

Superintendent of the Census until the present time, without salary, giving to the work so much of his time and attention as was required.

I respectfully renew my recommendation for a census to be taken in 1875, the results of which could be published in season for the centennial celebration of the Independence of the United States. The suggestion to this effect contained in the last annual report of this Department has received the cordial approval of a large portion of the press of the country. It is scarcely possible to doubt that authentic information respecting the increase in population and wealth during any term of five years would well repay its cost in directing our industrial development, as well as through the better information of Congress respecting the condition, wants, and capacities of the people. But there appears to me to be a peculiar fitness in thus ascertaining by official count our numbers and resources at the close of the first century of the national life, and exhibiting to the world, in this conspicuous manner, the wonderful effects wrought by the social, industrial, and political freedom which the people of the United States have enjoyed. I sincerely trust that this measure may receive the early and favorable attention of Congress.

RAILWAYS.

The subscriptions to the stock of the Union Pacific Railroad Company amount to \$36,783,000, of which \$36,762,300 has been paid. The receipts for the year ending 30th June, 1873, from the transportation of passengers were \$3,786,208.20; of freight, \$5,024,998.37; and from miscellaneous sources, \$822,758.52; total, \$9,633,965.09. The entire cost of the road and fixtures to said date was \$112,259,336.53, and the operating expenses of the road for the last fiscal year (ending 30th June, 1873) were \$4,697,999.50. The total bonded indebtedness of the company at the end of that year amounted to \$75,427,512, of which \$27,236,512 is due to the United States. The "floating debt" to same period (not including the company's note for \$2,000,000 issued to the Hoxie contract) amounted to \$1,940,239.73, and "exchange loans," £120,000.

The Central Pacific Railroad Company by consolidation (as heretofore reported) embraces, besides the original company of that name, also the Western Pacific, the California and Oregon, the San Francisco and Oakland, and the San Francisco and Alameda Companies. Stock to the amount of \$62,608,800 has been subscribed, and \$54,275,500 paid. The receipts for the year ending June 30, 1873, from transportation of passengers were \$4,388,307.14, and of freight, \$7,277,482.33; total, \$11,665,789.47. The operating expenses of the road for the year were \$5,349,425.21, leaving net earnings to the amount of \$6,316,364.26. At the close of said year the indebtedness of the company amounted to \$85,433,816.60, of which \$27,855,680 was to the United States.

The stock subscription of the Central Branch Union Pacific Railroad

Company is \$1,000,000, of which \$980,600 has been paid in. The receipts for transportation of passengers for the year ending June 30, 1873, were \$48,591, and for freight \$71,071.91; total, \$119,662.91. The expenses of the road and fixtures have been \$3,723,700. The expense of the road for the fiscal year ending as above stated is \$172,231.44. The company's indebtedness (in addition to the first-mortgage bonds, \$1,600,000, and the Government loan, \$1,600,000) is \$303,058.45.

The amount of stock of the Kansas Pacific Railway Company subscribed is \$9,992,500, and the amount paid is \$9,655,950. Total amount of stock allowed by law, \$10,000,000. The receipts for the transportation of passengers for the year ending June 30, 1873, are \$1,393,633.96; for freight during same period, \$2,285,038.52; miscellaneous earnings, \$69,617.34; total, \$3,748,289.82. The cost of construction and equipment of 639 miles of main line, and 33 miles of branch line (672 miles) has been \$33,392,840.66. The total funded debt of the company is \$27,452,100, of which \$6,303,000 is due the United States. Other liabilities and indebtedness, \$2,996,148.97; total, \$30,448,248.97.

The amount of the stock of the Denver Pacific Railway and Telegraph Company subscribed and paid in is \$4,000,000. The receipts for the year ending June 30, 1873, for transportation of passengers were \$173,720.58; of freight, \$149,012.42; and from miscellaneous sources, \$13,215.25; total, \$335,948.25. The cost of construction and equipment of the road to the date above stated was \$6,493,800, and the indebtedness of the company to that date was \$2,513,747.16.

Stock of the Sioux City and Pacific Railroad Company to the amount of \$4,478,500 has been subscribed, of which \$1,791,400 has been paid in. The receipts for the year ending June 30, 1873, from the transportation of passengers were \$73,460.84; of freight, \$169,507.36; of mails, \$7,299.98; from express, \$2,617.38; and from miscellaneous sources, \$9,044.56; total, \$261,930.12. The expenses during that period were \$201,164.60, leaving net earnings, \$60,765.52. The indebtedness of the company is \$3,339,743.80, of which \$1,628,320 is due to the United States. This road commences at Sioux City, Iowa, and extends to Fremont, Nebr., where it intersects the Union Pacific Railroad, a distance of 101⁷⁷₆₆ miles.

At the close of the fiscal year ending June 30, 1873, the amount of subscribed stock of the Southern Pacific Railroad Company of California was \$13,189,400; of which \$11,965,400 was paid. Explorations and examinations of former preliminary lines have been continued since the last report amounting to 750 miles; 114⁵⁰₆₆ miles of road have been permanently located, and 64⁵⁰₆₆ completed. Twenty miles of this latter distance is on the route from Tipton to Delano, and 50 miles (commencing at the San Fernando Pass via Los Angeles, thence toward San Bernardino, ending about 29 miles easterly from Los Angeles) on the line from Tehachapi Pass to Fort Yuma. Forty-two and one-half miles have been completed on the branch line in the Salinas Valley. The

cost of the surveys to June 30, 1873, has been \$105,000. The amount received for the transportation of passengers for the fiscal year was \$469,789.63; of freight, \$486,465.37; total, \$956,255. The expenses of the road for the year were \$458,739.14, leaving net earnings \$497,515.86. The indebtedness of the company is shown by their report to be \$8,050,000. The fourth section of 20 miles of this road was accepted by you on the 6th of August last, making the total number of miles miles accepted $90\frac{2}{100}$.

Stock of the Texas and Pacific Railway Company has been subscribed to the amount of \$2,000,000, of which \$200,000 has been paid in. The bonds of the company consist of two kinds, viz, "First-mortgage six per cent. gold-construction bonds," and "First-mortgage land-grant" bonds. Of the former none have been issued. Of the latter, there have been issued in the purchase of consolidated roads, \$4,000,000. The indebtedness of the company is shown by their report to be as follows: Capital stock, (as shown above,) \$2,000,000; land bonds, \$4,000,000; debt Southern Pacific Railroad Company to State of Texas, assumed by the Texas and Pacific Railway Company, \$209,126.31; floating debt, \$790,095.71; "Interest coupons on land bonds," \$140,000; total, \$7,139,222.02. The operating receipts and expenditures of the road for the year ending June 30, 1873, have been as follows: *Receipts*, from passengers, \$104,392.44; freight, \$223,211.99; United States mails, \$5,328; miscellaneous, \$448.43; total, \$333,380.86. *Expenditures*, for conducting transportation, \$51,994.43; maintenance of roadway, \$111,044; cost of running and maintenance of motive power and cars, \$62,370.20; general expenses, \$31,153.56; total, \$256,562.19. Receipts over expenditures, \$76,818.67. There have been 109 miles of this road constructed, and 355 miles graded, bridged, and tied. Since the date of the last report of the company (June 30, 1872) the engineers in charge of the surveys have run over 8,000 miles of instrumental lines, and made 15,000 miles of reconnoissance, developing a country 1,500 miles long east and west, and 150 miles in width north and south, so thoroughly that the line of location from Red River to the Pacific can very nearly be determined. The lines of road surveyed and in part undergoing construction are as follows: *Southern division*, from Longview, Tex., to Fort Worth, 155 miles; *Jefferson division*, from Marshall to Texarkana, 69 miles; *Transcontinental division*, from Texarkana to Fort Worth, 237 miles; *Brazos division*, from Fort Worth to the one-hundredth meridian, about 175 miles; *Pecos division*, from the one-hundredth meridian to Rio Grande River, 412 miles; *New Mexico division*, from Rio Grande to the Pimas Villages, $388\frac{5}{100}$ miles; *California division*, from Pimas Villages to San Diego, Cal., 444 miles; total distance, $1,880\frac{5}{100}$ miles. The greatest altitude reached in crossing the continent is 6,355 feet.

The Atlantic and Pacific Railroad Company's report for the year ending June 30, 1873, shows that \$19,760,300 of stock has been subscribed and paid in. Grading has been done in the Soledad Pass, Cal., and \$8,013.72 expended in grading at this pass, to June 30, 1873. On June

29, 1872, the company leased for a term of 999 years the Pacific Railroad of Missouri, extending from Saint Louis, Mo., to Kansas City, Mo., including Carondelet Branch, (297½ miles,) and assumed the leases to said Pacific Railroad of the following-named lines: Missouri River Railroad, 25½ miles; Leavenworth, Atchison and Northwestern Railroad, 21½ miles; Osage Valley and Southern Kansas Railroad, 25 miles; Lexington and Saint Louis Railroad, 55½ miles; Saint Louis, Lawrence and Denver Railroad, 61 miles. The cost of the surveys of the Atlantic and Pacific Railroad to June 30, 1873, was \$306,357.84. The amount received from passengers on the Atlantic and Pacific Railroad Division, was \$303,357.84; on the Pacific Railroad of Missouri and leased-lines division, \$1,073,981.02 total, \$1,377,338.86. The amount received for freight on the Atlantic and Pacific Railroad Division was \$945,711.69; on the Pacific Railroad and leased-lines division, \$2,587,852.37; total, \$3,533,564.06. The cost of the Atlantic and Pacific Railroad and fixtures, as appears from the accounts of the Treasurer, June 30, 1873, was \$36,262,322.70. The running expenses of the road from 1st July, 1872, to June 30, 1873, were \$692,529.16. The same expenses of the Pacific Railroad of Missouri and leased lines for that period, were \$2,693,926.36; total for the fiscal year, \$3,386,453.52.

The indebtedness of the company is as follows: Bonded debt of the South Pacific Railroad Company, secured by mortgage of lands, assumed, \$7,190,000; Atlantic and Pacific Railroad Company's bonds dated 1st July, 1868—20 years—\$2,945,500; Atlantic and Pacific Company's railroad and land-grant bonds, November 1, 1871, \$1,190,000; same company's central division land-grant bonds, dated November 1, 1871, \$797,922; same company's second mortgage railroad and land-grant bonds, dated November 1, 1871, \$1,272,000; same company's scrip for bonds dated November 1, 1870, \$1,718,438.36; total bonded indebtedness, \$15,113,860.36; floating indebtedness, \$2,758,025.38; total indebtedness, \$17,871,885.74. Assets of cash, debts due company, and securities other than of this company, amounting to \$1,340,070.31, on hand.

Stock of the Northern Pacific Railroad Company, to the amount of \$100,000,000, has been subscribed, and certificates for 172,695 shares of \$100 each have been issued. During the year 1873, the road was definitely located from the mouth of Heart River, on the Missouri, to the mouth of Glendive Creek, on the Yellowstone, a distance of 205 miles. The precise point of crossing the Missouri River has not yet been fixed by the company. The surveys necessary to complete a continuous line across the continent, which were left unfinished last year by reason of the open hostility of the Sioux Indians of Montana and Dakota, have, this year, been brought to a most satisfactory conclusion. A continuous line has been surveyed from Lake Superior to Puget Sound, and the data have been obtained for deciding the final location of the road between the above-named termini. The entire line of route has not as yet been definitely fixed upon. The company reports that "for climate,

soil, quantity, and variety of mineral wealth, and all the elements necessary to the support of a dense population, there is no zone of similar extent and value between the Mississippi River and the Pacific Ocean" as that "of the region lying between and contiguous to parallels 46 and 47 north latitude." The whole amount expended on surveys from the beginning of the work to the 1st of July last is \$1,058,873.74. The extent of line surveyed is 9,388 miles, and, in addition, 2,350 of river-reconnaissance. The amount received from passengers on the road (in Minnesota and in Washington Territory) is \$153,551.97; for transportation of freight, \$393,549.23, which includes a few days of the earnings of June, 1873, in Dakota. The expense of the road and fixtures has been \$20,092,380.09, and the indebtedness of the company is \$29,309,337.40. The word "expense," as used above, is said by the company "to mean the cost of the road proper and its fixtures" only. The company's report states that, on October 1, 1873, trains were running regularly, (both passenger and freight,) engaged in the general traffic from Lake Superior to the Missouri River, a distance of 453 miles, and from Kalama, on the Columbia River, northward, 65 miles toward Puget Sound. Beyond that, a distance of 25 miles of track has been laid, and 15 miles more nearly graded, which, when completed, (about the 1st of December, this year,) will make a continuous road from the Columbia River to Puget Sound, 105 miles. On the 6th of last January you accepted the first 228 miles of the Northern Pacific Railroad in Minnesota, (from its junction with the Lake Superior and Mississippi Railroad, near Thomson, to the Red River of the North;) and, on the 10th of September, 1873, 65 miles of the road in Washington Territory, "on its main line between the city of Portland, Oreg., and its western terminus on Puget Sound." The report of the commissioners appointed to examine the completed portion of the road (195 miles) in Dakota Territory has not yet been received.

On the 11th of March last you accepted $155\frac{35}{100}$ miles of the Missouri, Kansas and Texas Railway, from the $86\frac{76}{100}$ mile (south of the southern boundary-line of Kansas) to Red River, near Preston, Tex. Total number of miles accepted $242\frac{11}{100}$.

I accepted, on the 4th of September last, $84\frac{28}{100}$ miles of the Cairo and Fulton Railroad, lying between Little Rock, in Arkansas, and the southern boundary of Missouri. Application having been made for the examination of the portion of this road lying between Little Rock and Fulton, commissioners have been appointed for that purpose, but their report has not yet been received.

You accepted, November 4, 1872, the final portion ($50\frac{3}{4}$ miles) of the Burlington and Missouri River Railroad, in Nebraska, reported on by commissioners on the 30th October of that year. This makes a total accepted line in that State of $190\frac{3}{4}$ miles.

That portion of the Memphis and Little Rock Railroad from the west

side of the Saint Francis River to a point opposite the city of Little Rock, on the north bank of the Arkansas River, called "Argenta"— $91\frac{1}{2}$ miles—was accepted by the Department on the 5th of last March.

GEOLOGICAL SURVEY.

The geological and geographical survey of the Territories of the United States, under the direction of this Department, and conducted by Professor F. V. Hayden, United States Geologist, has been continued during the past season with very satisfactory results. The section of country traversed by the survey lies in the central portion of Colorado Territory, lying between parallels 38° and $40^{\circ} 20'$ north, and meridians $104^{\circ} 30'$ and 107° west, comprising about 20,000 square miles. This area was divided into three districts, and the survey of each intrusted to a party of geologists and topographers. The northern district included the Middle Park; the middle district, the South Park; and the southern district, the San Luis Valley. The whole area, which is about 160 miles long by 130 wide, embraces the most interesting ranges of mountains and the largest group of lofty peaks yet explored on this continent. Besides the parties already referred to, three other parties were in the field, one of which carried on the primary triangulations from the summits of the most important peaks in the area of the survey. These several parties composed, altogether, a complete organization for the purposes of the survey.

A preliminary field-map was prepared last spring, based upon the land surveys made by this Department, which indicated those portions of our territorial domain which were least known, and which promised the most valuable results. The field-work was commenced about the middle of May last, and the parties have all returned from the scene of their labors. The results of the survey are very satisfactory, and the collections in geology, botany, and natural history are as extensive and valuable as those of former surveys.

The geologist in charge requests a deficiency appropriation, to enable him to continue and complete the work of the year, and assigns the following reasons for the occurrence of the necessity for such an appropriation, viz :

The geological survey of the unknown portions of the national domain, especially in the mountainous localities, and those remote from routes of ordinary travel, involves a large expenditure for what is known as an "outfit." In former surveys the materials composing the "outfit" have been sold at the close of the season, for a fair percentage upon their cost; but, at the close of the present season, it was found that the "outfit" could not be sold except at a great sacrifice. It was, therefore, deemed advisable to retain the "outfit" for use during the season of 1874, should Congress authorize a continuation of the survey. The estimated value of the materials of said "outfit" is \$20,000, and the ge-

ologist in charge deems an appropriation for that amount necessary to the completion of this season's work.

In view of the importance to science and to the material interests of the country of the objects of the survey, I recommend the deficiency appropriation asked for, as well as the regular annual appropriation for its continuance.

THE YELLOWSTONE NATIONAL PARK.

I deem it incumbent upon me to refer to the present unprotected condition of the Yellowstone National Park. No appropriation has yet been made for the purpose of opening the park to the public and of enabling this Department to carry into effect the necessary rules and regulations for its government. I am informed that the park has been visited during the past summer by many persons, and that it has been despoiled by them of great quantities of its mineral deposits and other curiosities.

A superintendent of the park was appointed in May, 1872, but there being no appropriation from which his compensation could be paid, his services have, necessarily, been gratuitous, and he could not be expected, under such circumstances, to reside permanently in the park. Applications have been made by various parties for permission to erect buildings and to construct roads within the park. The act of March 1, 1872, confers upon me the necessary authority to grant leases for building purposes; but no leases have been granted, for the reason that sufficient information has not been obtained as to the responsibility of the several applicants. It appears to me to be eminently proper that early steps should be taken by Congress for the protection of this great national wonder from the vandalism of curiosity hunters. This Department should not be held responsible for the condition of the park, so long as there is no money under its control applicable to the ends contemplated by the act of March 1, 1872. The boundaries of the park should be properly surveyed and located, as many persons desire to enter and settle upon public lands contiguous thereto.

CAPITOL.

The architect reports various repairs and improvements made in the Capitol during the past year. There have been provided large coal-vaults for each wing of the building; a fresh-air duct for the heating apparatus of the Senate wing, and a passenger-elevator for the same wing. The galleries of the hall of the House of Representatives have been rearranged, and new chairs and desks for that hall have been provided. The steam-boiler and heating-apparatus have been thoroughly repaired, and many committee-rooms have been refitted, painted, and improved. The architect recommends that while the defective portions of the rooms in

the center building are being renewed, the improvements may be made in a fire-proof manner by replacing the present wooden rafters with iron ones; also, that the remodeling and finishing of the rotunda be made to harmonize with the vault and interior walls of the dome.

First street, which bounds the Capitol grounds on the west, has been paved from Pennsylvania avenue to Maryland avenue with cypress-wood pavement, and the curve at the southwest, from Maryland avenue to New Jersey avenue, is now being paved with granite blocks. Over one hundred thousand loads of earth have been deposited in the grounds south of the Capitol and on south B street. The Capitol grounds are now in a condition for laying out the interior walks and for planting, and the architect recommends the employment of a competent landscape gardener, under whose direction the grounds may be properly laid out and ornamented.

The architect reports that the buildings of the reform-school for the District of Columbia are nearly completed. The main building is so far advanced that portions of it are used as work-rooms. It is expected that said building will be completed before Congress convenes. The family building has been occupied since the middle of last winter.

EXTENSION OF CAPITOL GROUNDS.

Congress, at its last session, appropriated the sum of \$284,199.15 wherewith to complete the purchase, by the United States, of the property embraced in squares 687 and 688, lying adjacent to the square East of the Capitol. The whole of said appropriation has been disbursed through the supreme court of the District of Columbia, and the title to the entire property above described is now vested in the United States. Under authority conferred by the act of March 3, 1873, those of the buildings and other improvements on said property which were not required for public use have been sold at public auction, and the materials have nearly all been removed therefrom. It is expected that the two remaining buildings on square 688 will be removed, and that all the materials yet remaining on both squares will be cleared away, before the meeting of Congress. Litigation may be necessary in order to conclude the sale, at auction, of one of said buildings. I am unable, therefore, to report the exact amount which will have been received from the sale of said improvements. The amount thus far received is \$19,357.44, from which the sum of \$3,619.80 has been paid for advertising, auctioneer fees, extra clerical labor, services of commissioners of appraisement, and the other expenses incident to the purchase of said squares and the sale of said improvements. When the whole expenses shall have been paid, the residue, which will approximate the sum of \$17,000, will be applied to the improvement of the extension, as provided for by law.

This addition to the grounds surrounding the Capitol will bring them into greater harmony with the noble proportions of that building than

has hitherto been the case, and when they shall have been properly laid out and ornamented, they will form an appropriate setting for the National Capitol.

PNEUMATIC TUBE.

Congress, on the 10th day of June, 1872, appropriated the sum of \$15,000 for the purpose of constructing a pneumatic tube to connect the Capitol with the Government Printing-Office, for the transmission of books, packages, &c., "the money to be expended under the direction of the Secretary of the Interior, and the work to be done under the supervision of the architect of the Capitol extension." Pursuant to this provision of law, a contract for the construction of such tube was awarded by said architect on the 20th of June, 1872, and the same was approved by this Department. It was stipulated, in said contract, that the tube should be completed and ready for use on or before the 30th day of June, 1873; but, on the 26th of March last, a resolution was adopted by the Senate, directing me to report to that body, at its next session, all the information in my possession in regard to the non-completion of the tube, the amount expended in its construction, and other circumstances connected therewith. To enable me to answer the resolution intelligently, I designated Joseph Henry, Secretary of the Smithsonian Institution, O. E. Babcock, Superintendent of Public Buildings, and A. M. Clapp, Congressional Printer, as a committee to examine the work done and report to me their views in relation thereto. A copy of their report, together with a detailed statement of all the circumstances connected with the construction of the tube, will be laid before the Senate at its approaching session. The first attempt to lay the tube was unsuccessful, owing to various causes. The contractor, however, is now making another endeavor to construct such a tube as will accomplish the purposes intended, and informs me that the tube will, probably, be completed before the 1st of January next. His present operations are conducted at his own expense, so that no further appropriation by Congress will be necessary to its completion.

BENEVOLENT INSTITUTIONS.

INSANE ASYLUM.

During the year ending June 30, 1873, there were under treatment at the Government Hospital for the Insane 762 patients, of whom 413 were from the Army and Navy, and 573 were males. Two hundred and one patients were admitted during said year; 66 were discharged as recovered, 24 as improved, and 7 as unimproved. The recoveries were 68 per cent. of the discharges including, and 46 per cent. excluding deaths. During the same period 45 patients died, leaving under treatment at the close of said year, 620 patients, of whom 468 were males. Sixty-nine of those treated during said year were private or pay-patients, of

whom 24 were discharged, 4 were transferred to the list of indigent patients, and 41 remained under treatment at the close of the year. 3,348 persons, of whom 1,634 were native-born, have been treated in the hospital since it was opened. The general health of the hospital has been very good.

The expenditures for the past fiscal year amounted to \$136,992.43. The amount received for board of private patients was \$9,744.86, and that from the sale of live stock, &c., \$2,247.57. The products of the farm and garden during the year were estimated as worth \$17,763.25, and the value of the live stock, farm and garden implements, &c., belonging to the institution, is estimated at \$16,418.20.

In addition to the regular expenditures for the support of the hospital, there has been expended the sum of \$37,800 in the erection of an extension of the wards for the excited class of patients, and \$6,000 for heating boilers. There are now owned by the United States and devoted to the objects of the hospital a little upwards of 419 acres of land; 360 acres are embraced in one nearly complete parallelogram, and the remainder comprises a single tract, conveniently situated for grazing, or for the cultivation of the staple annual crops. The tract of 185 acres, originally purchased for the hospital, and within which its buildings are situate, is inclosed by a wall nine feet high, excepting on the river front.

The board of visitors submit the following estimates for the year ending June 30, 1875, viz:

For support of the institution, \$140,785; for repairs and improvements, \$15,000; for completing the river wall, and raising the boundary walls at their intersection with the former, \$8,748; for the erection, furnishing, and fitting-up of an extension of the center building of the hospital, \$35,956; for a coal vault in the rear of the east wing, \$2,500; for the erection, furnishing, and fitting-up of an extension of the west detached building for patients, \$12,000, and to supply deficiencies for the current year, \$11,366; a total of \$226,355.

DEAF AND DUMB INSTITUTION.

On the 1st instant there were 108 pupils in the Columbia Institution for the Deaf and Dumb, 34 of whom were received since July 1, 1872. Of these 60 have been in the collegiate department, representing seventeen States and the District of Columbia, and 48 in the primary department. One hundred and eight pupils have been under instruction since July 1, 1872, of whom 92 were males. Three students, having passed satisfactory examinations in the entire course of studies, received the degree of Bachelor of Arts. The health of the institution was excellent, not one death having occurred during the year.

The receipts for the support of the institution, during the last fiscal year, exceeded the disbursements \$821.39, as they did also for the improvement of the grounds, \$1,626.19.

The board of directors report that, in completing the purchase of the Kendall Green property, toward which Congress, in 1871, appropriated

the sum of \$70,000, a balance of indebtedness remains, unprovided for, of \$10,697.46. It had been hoped by the board that this amount could be raised by private subscription, but owing to the fact that the title to all the real estate of the institution is vested in the United States, this expectation, it is feared, will not be realized, as those who are called upon for subscriptions are disposed to decline aiding what has, practically, become a Government institution. No estimate of an appropriation for the amount is submitted by the board, but they invite attention to the indebtedness, representing the importance of securing the possession of this valuable property, and trust that Congress will be disposed to make an additional appropriation for the purpose.

The following estimates are submitted by the Board of Trustees for the ensuing fiscal year :

For support of the institution, salaries and incidental expenses, including \$500 for books and illustrative apparatus, \$49,500 ; and for continuing the work of erecting, furnishing, and fitting up of the buildings of the institution, in accordance with plans heretofore submitted to Congress, including necessary repairs to the completed portion thereof, \$54,000 ; a total of \$103,500. The directors state that the estimate of \$54,000 for building purposes is greatly needed to complete the college building, and to provide for the erection of two houses for professors. The college building has been in an incomplete condition for nearly seven years, and requires enlargement for the increasing wants of the institution. The plans submitted with the ninth report of the institution showed the necessity of ultimately erecting six dwelling houses for its officers, as it was considered to be to the interests of the institution for its officers to reside on the premises. Two of such dwelling houses have been built, and it is desirable to erect two more at present.

COLUMBIA HOSPITAL FOR WOMEN.

During the last fiscal year 2,285 women received treatment at the Columbia Hospital for Women and Lying-in Asylum. Of these, 2,135 were received during the year, and 1,924 were out-door patients. Twelve hundred and seventeen were restored to health, 542 relieved, 104 discharged as incurable, 9 died, the results are not known in 296 cases, and 117 remained under treatment. Of the whole number treated, 401 were foreign born. The hospital has been remodeled, an additional story and a number of private rooms added, and a thorough system of sewerage, heating and ventilation of the building introduced. The wards and private rooms have been refurnished, and every comfort that can be desired for the sick has been supplied.

The estimates for the next fiscal year are as follows: For the support of the institution, \$24,000, and for the erection of a stone wall around the western and northern portion of the grounds, with stone coping and iron railing, and for grading and graveling the grounds, \$10,000 ; a total of \$34,000. The directors state that the improvements estima-

ted for are necessary from the fact that the grounds north of the hospital building are twenty feet above the proper grade, and must be graded and terraced to render them serviceable.

NEW JAIL.

Considerable progress has been made during the year in the construction of a jail in and for the District of Columbia, authorized by an act of Congress approved June 1, 1872, to be erected under the supervision of the supervising architect of the Treasury Department, after plans and designs to be prepared by him and approved by a board of commissioners, composed of the Secretary of the Interior, the governor of the District of Columbia, and the chief justice of the supreme court of said District.

At a meeting of said board, held October 22, 1872, certain general plans, designs, and specifications, prepared by said supervising architect, were approved; and at a subsequent meeting, viz., on April 15, 1873, the supervising architect submitted the full working plans and specifications for the jail, which were approved by the board. Under authority conferred by the board, the supervising architect has, at various times, advertised for proposals for such materials as were required in the construction of the jail, and contracts have been awarded to various parties, who were the lowest responsible bidders in each case, for rubble-stone, concrete, cement, sand, ironwork, and cut stone. In each instance the contracts referred to were authorized by the board of commissioners, and have been approved by at least a majority of its members. As the work progresses it will be necessary to award contracts for the necessary flagging, and for a galvanized iron cornice for the building.

The supervising architect reports that the foundation-walls have been laid, the superstructure built up to an average height of eleven feet, and about two-thirds of the necessary grading completed. He states that if no unforeseen difficulties occur, the building will probably be completed within the current fiscal year.

The architect represents that, although the plans for the jail were prepared in view of the amount appropriated for the purpose, viz., \$300,000, unexpected and unavoidable expenses have been incurred in grading the site for the building, and in building a wharf on the Anacostia River, amounting to upwards of \$15,000, which amount he considers to be not properly chargeable to the appropriation for the erection of the jail, and should be refunded thereto; otherwise, an additional appropriation will become necessary. He also states that in order to keep the cost of the jail within the amount appropriated, he was compelled to provide in the specifications for a galvanized iron cornice; for wooden joists and floors to warden's office and chapel wing, and for timber framing and boarding to the roof, with a tin covering to the same. He expresses the opinion that the building should be constructed in a fire-proof manner; that the cornice

should be of stone, and the roof-covering of slate, and states that in order to accomplish these ends and insure a substantial fire-proof building, an additional appropriation of \$100,000 will be necessary.

The supervising architect invites attention to the fact that the building, when completed, will be suitable, not only for the ordinary purposes of a jail, but, also, for those of a penitentiary; and, as the grounds surrounding it are of ample capacity, he strongly recommends that the necessary authority be obtained from Congress for its use as a penitentiary as well as a jail. He states that the additional expense would be comparatively small, as it would involve little more than the cost of the necessary work-shops, and the materials necessary for the construction of a wall to inclose the grounds, which could be entirely erected by the labor of the convicts. He is of the opinion that, if this suggestion were adopted, a large saving in the expense of the jail to the Government would be made, and that, in time, the use of convict labor would constitute a source of revenue to the District of Columbia. He also suggests the importance of providing a separate building for the detention and punishment of female prisoners, which should be under the exclusive charge of female officers. He states that experience has demonstrated that proper prison discipline is impossible when both sexes are confined in the same building, and that, if the reformation of female convicts be intended, they should be committed exclusively to the custody of their own sex. He recommends, therefore, that authority be asked of Congress for the erection of a house of correction for the punishment and reformation of female convicts.

The total expenditures on account of the construction of the jail, up to the 30th ultimo, amounted to \$95,022.60, leaving an unexpended balance of the appropriation of \$204,977.40.

TERRITORIAL PENITENTIARIES.

Congress, by an act approved February 22, 1873, appropriated the sum of \$40,000, to be set apart and paid out of the net proceeds of the internal revenue in the Territory of Washington for the fiscal years severally ending on June 30, 1866, June 30, 1867, and June 30, 1868, for the purpose of erecting, under the direction of this Department, a penitentiary building in said Territory. The sum of \$20,000 had been thus set apart and appropriated for the purpose by an act approved January 22, 1867, but that amount was found to be inadequate for the construction of a proper penitentiary, and an additional sum of \$20,000 was asked for. The act of February 22, 1873, is amendatory of the former act, and provides the same amount for a penitentiary in Washington Territory as had been provided for such buildings in the other Territories.

A site for the building having been selected by the commissioners appointed by the legislative assembly of the Territory, and approved

by this Department, immediate steps were taken for the erection of the building. Proposals were duly invited by public advertisement, and on the 26th of April last a contract for the erection of one wing of the building, in accordance with the plans adopted, was awarded to the lowest responsible bidder. Upon a careful comparison of the proposals it was found that but one wing of the penitentiary could be built within the amount appropriated. By the terms of the contract the building is required to be completed by the 24th of November next, and the latest advices from the superintendent of construction indicate that such requirement will be fulfilled by the contractor. When the building is finished it will be delivered into the charge of the United States marshal for the Territory, pursuant to the provisions of section one of an act of Congress approved January 10, 1871. By a subsequent act approved January 24, 1873, Congress repealed so much of the former act as related to "placing the penitentiaries in the Territories of Montana, Idaho, Wyoming, and Colorado under the care and control of the respective United States marshals for said Territories," and transferred the care and custody of said penitentiaries to said Territories respectively. Inasmuch as the erection of the penitentiary for Washington Territory was not provided for until after the passage of the latter act, and as no reference to said penitentiary is made therein, its provisions are not applicable to that penitentiary, and the building will necessarily remain in the custody of the United States marshal until Congress shall otherwise direct, as in the cases above mentioned.

PUBLIC DOCUMENTS.

Frequent application is made to this Department, by officers of the Government authorized to receive them, for volumes of the United States Statutes and Wallace's Reports of the Supreme Court, to complete deficient sets in libraries and to furnish offices newly created. As the supply of the earlier volumes of the United States Statutes and of Wallace's Reports is entirely exhausted, the Department is and has been for some time past unable to furnish them. I would suggest that a sufficient amount be appropriated to furnish these documents, in order that requisitions for them in future may be filled.

In this connection, I beg to call your attention to the fact that the existing laws regulating the distribution of the standard public documents, such as the United States Statutes at Large, Wallace's Reports of the Supreme Court, the Official Register, and the Pamphlet Laws, are somewhat vague and indefinite in specifying the officers of the Government who are entitled to them. The experience of late years has also demonstrated that the number of copies of the before-mentioned documents allotted to heads of Departments and Bureaus is altogether insufficient to meet the demands of the public business, and some increase should be made in these instances; especially should the number of

copies of the United States Official Register ordered by law to be printed on the assembling of each new Congress be augmented to at least double the number now authorized, which is but 750 copies.

It is highly important that some action should be taken in this matter, with the view of collecting in one comprehensive act the duties assigned to this Department, in connection with the custody and distribution of public documents.

NEED OF ADDITIONAL ROOM FOR THE DEPARTMENT.

In closing this report I desire to invite special attention to the necessity for additional room for the accommodation of the several bureaus of the Interior Department. At the present time almost the entire clerical force of the Pension Bureau, with all its voluminous and valuable files and records, the entire Bureau of Education, and the Geological Survey, are located in buildings owned by private parties, and in the case of the former especially, in a building that is poorly protected from fire. The rapid growth in the business of the Patent-Office will, in a few years, if it does not already, require all of the room in the present Patent-Office building for its occupancy, and measures should be taken at an early day to provide for the accommodation of the other bureaus of the Department in a suitable fire-proof building.

I am, sir, very respectfully, your obedient servant,

C. DELANO,

Secretary.

The PRESIDENT.



ANNUAL REPORT

OF THE

SECRETARY OF THE INTERIOR

ON THE

OPERATIONS OF THE DEPARTMENT

FOR

THE YEAR 1874.



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RE PORT
OF
THE SECRETARY OF THE INTERIOR.

DEPARTMENT OF THE INTERIOR,
Washington, October 31, 1874.

SIR: I have the honor to submit, for your information and the consideration of Congress, the following summary of the operations, during the last fiscal year, of those branches of the public service which are placed, by law, under the supervision of this Department, and for the details thereof to refer to the accompanying reports of the chiefs of Bureaus and other officers.

INDIAN AFFAIRS.

The operations of the Indian Bureau, during the past year, are highly gratifying. They furnish conclusive evidence of the justice, wisdom, and practicability of the policy inaugurated by the present administration. The success of this policy is no longer a problem. If steadily pursued, we shall soon see all roving tribes located upon reservations. The disposition of the more restless and turbulent, to leave such reservations on hunting and marauding excursions, will rapidly disappear, and the improvement of the semi-civilized Indians, already so apparent in many localities, will be greatly accelerated. We may reasonably expect occasional disturbances in the future, caused by individual, or by disorderly bodies of Indians; but with a judicious and efficient execution of the present mode of treatment, it is not believed that we shall see another general or even serious Indian war. In my last annual report, a brief but distinct statement of the nature and scope of the Indian policy was attempted. I deem it best to refer to this subject again, in order to avoid either misapprehension or misrepresentation.

INDIAN POLICY.

The present method of dealing with the Indian race aims to induce, and when necessary to compel, the roaming tribes to accept reservations as rapidly as possible. On such reservations they are instructed in agriculture, and other pursuits incident to civilization, and with the aid of our Christian organizations, their intellectual, moral, and religious culture is advanced as rapidly as practicable. When a to

accept a reservation, and continues to violate the laws of civilization, it is treated with all needful severity, and thus made to appreciate the advantages of accepting the kind and humane treatment which the Government surely extends to such as are disposed to peace. If those who have accepted reservations leave their homes and commit depredations, they also are treated as offenders, and taught the necessity, as well as the advantage to themselves, of obedience and good behavior. By the judicious exercise of power and persuasion as thus indicated, it is the aim of the Government to deal kindly and justly with this unfortunate race, and to make them appreciate, as speedily as possible, the real motives and purpose of the Government. The execution of this policy is necessarily attended with difficulties, which cannot at once be entirely overcome. To distribute the supplies annually authorized by Congress among the Indians, [scattered, as they are, over a vast extent of territory,] in such manner as to be entirely just and most useful, is a very difficult undertaking. Agents employed to do this work must surrender, without adequate consideration, the advantages and comforts of civilized life, and endure hardships and privations which are not often appreciated. Nothing but a high sense of duty is sufficient to induce men of proper capacity and right motives to undertake this task. I feel it a duty to repeat here what I have said on this subject in former reports, that the welfare of this service would be greatly promoted by increasing the salaries of these agents, and, in my judgment, it would be a measure of economy as well as of justice to make such increase immediately. I am happy in being able to say that the earnest, active, and cordial co-operation of the several Christian organizations, to which the right of nominating agents has been assigned, and upon whose nominations alone such agents are appointed, is constantly improving the character of this class of employés, and thus we are each year, to some extent, advancing the service by obtaining agents more experienced and intelligent and of greater capacity for their secular as well as their moral and religious work. The Indian population of the United States, since the first occupation of our territory by white men, has been compelled to recede as the white population has advanced. The natural result has been the creation of a feeling among Indians that they have suffered great injustice at our hands. They have strong local attachments and adhere with tenacity to the home of their fathers. They once occupied without dispute vast regions of country which have been wrested from them. Under such circumstances, can it be supposed that they will accept the complete change in their modes of life, and in their management by the Government which is now being effected, without complaint and resistance, which may occasionally require the employment of force; or can it be supposed that time is not required for the accomplishment of such change? The complete success of this policy requires the cordial co-operation of the War Department, which, I am happy to say, has always been unquali-

fiedly given. It also needs the support and sympathy of the leading officers of the Army, who are necessarily charged occasionally with executing military orders for the purpose of compelling, on the part of the Indians, a compliance with the wishes of the Government. I am happy to say that such support and sympathy have, as a rule, been freely given. But this policy cannot be carried on successfully without the favor and support of Congress. The Indian race cannot be induced to abandon nomadic habits, where subsistence has been procured by hunting, and be placed upon reservations, unless supported and sustained by the Government, while being taught arts of civilization and habits of industry sufficiently to be self-supporting. The present policy therefore requires, in order to be successful, liberal appropriations. It is impossible to suppress the emotions produced by hunger and destitution, and it is not difficult to predict the effects of such emotions among either savage or civilized men. Undoubtedly, it is wiser and more humane, just, and economical to provide for the welfare of our Indian population under the existing policy than to encounter the consequences of hostility and war, which the abandonment of this policy would render inevitable.

Each year of this service presents to those most familiar with it new subjects requiring the favorable consideration and action of the legislative department of the Government, and to some of these, as developed by the experience of the past year, I deem it my duty to invite attention.

HOMESTEADS FOR INDIANS.

To aid in prosecuting the work of Indian civilization, I recommend the extension of the homestead-laws to Indians, with certain modifications, hereafter to be more fully stated. These laws at present apply to citizens of the United States only, and their provisions cannot be enjoyed except by that small portion of the Indian race who are legally entitled to the privileges of citizenship.

This Department has frequently been compelled to consider and determine the relations held by Indians to the General Government and their rights under the homestead-laws. On the 27th of March, 1872, a question came before it, which involved the status of the Ottawa and Chippewa Indians, and their rights under the treaty of July 31, 1855. The fifth article of this treaty (see Stats., vol. 11, p. 624) provided that "the tribal organization of said Ottawa and Chippewa Indians, except so far as may be necessary for the purpose of carrying into effect the provisions of this agreement, is hereby dissolved." Such dissolution, however, was dependent upon the payment to the Indians by the United States of certain sums of money, specifically provided for in the treaty. This payment having been made, the question was submitted for decision whether these Indians then became citizens of the United States and entitled to make homestead-entries. This question involved a consideration of the civil status of Indians after the dissolution of their tribal relations had been accomplished with the consent of the Government.

The provisions of the fourteenth amendment to the Constitution material to the question are as follows:

Persons born and naturalized in the United States, and *subject to the jurisdiction thereof*, are citizens of the United States and of the States wherein they reside. Representation shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed.

These Indians were born in the United States, and, therefore, expressly included in the provisions above quoted, provided they were "*subject to the jurisdiction thereof*." During the existence of tribal relations, they were not subject to the jurisdiction of the United States. They were, however, in some sense subjects of the United States, but not citizens in mere right of home birth. (See Opinions Attorneys-General, vol. 7, p. 749.)

It would perhaps be proper to say that Indians, while in this condition, are "domestic subjects;" but certainly they are not the "sovereign constituent ingredients of the Government." This principle has been several times recognized by the courts. (20 Johnson, 193; 5 Peters, 1; 6 Peters, 515; the Kansas Indians, 5 Wallace, 737.)

When tribal relations have been dissolved, with the consent of the United States, by treaty or legislative enactment, there is no longer any dependent nation or tribe, and those who composed the previous Indian community are merged into the mass of population, and become subject to the jurisdiction of the United States. They are then liable to taxation, and are to be counted in the enumeration for representation.

By the fourteenth amendment, Indians not taxed are excluded from the basis of representation. This embraces simply such Indians as are not liable to taxation; and in the case of the Kansas Indians, already referred to, the Supreme Court held that they were not liable to taxation while the tribal relation continued. This reasoning implies that when that relation is ended they become liable to taxation, and are then to be counted in the enumeration for representation.

Thus the Department arrived at the conclusion, that when an Indian tribe is dissolved and its tribal relations ended, with the consent of the United States, either by treaty or legislative enactment, the members of such tribe become *ipso facto* citizens of the United States, and entitled to all the privileges and immunities belonging to other citizens.

The attention of the Department was again called to this subject February 23, 1874, when the following question was presented for consideration:

In the absence of congressional legislation, or treaty provision specially authorizing it, can an Indian, by mere act of voluntarily abandoning his tribal relations and ceasing to claim or exercise any of the special privileges, immunities, or exemptions incident to such a political condition, and by adopting the habits and customs of civilized life, become, without further action on his part, a citizen of the United States?

To this inquiry the Department answered, that an Indian cannot vol-

untarily dissolve his relations with his tribe, and thereby become a citizen of the United States ; that, before citizenship can be created, the tribal relations must be dissolved by the tribe *as a tribe*, and that, too, with the consent of the General Government, as shown by treaty or act of Congress.

Reviewing these opinions, I feel assured of their correctness. It was, in my judgment, inconsistent with sound law, as well as with public policy, to permit an individual Indian, by voluntarily withdrawing from his tribe, to become a citizen without some act of the Government recognizing his citizenship.

Under these circumstances, and in view of the importance of this subject, I deem it proper to invite the attention of Congress to the recommendation of the Commissioner of the General Land-Office in favor of legislation in behalf of Indians who desire to withdraw from their former associations, become citizens of the United States, and avail themselves of the benefit of the homestead-laws.

A common ownership of property is the normal condition of the Indian race, and with it are found nomadic habits totally inconsistent with the idea of permanent habitations, individual ownership, and domestic industry. The work of civilization can never be completed until these habits are abandoned. Every proper inducement, therefore, ought to be offered the Indian, which will prompt him to individual ownership of property, and such habits of industry and economy as are incident to our civilization.

Our homestead-laws require residence and cultivation for five years before the applicant becomes entitled to a patent for his land. These five years afford considerable guarantee that no one will apply to make homestead-entries unless he possesses the qualities essential to citizenship.

Should it be suggested that the extension of this privilege to Indians would furnish inducements to speculators to use them in acquiring titles to our public lands, I would reply that this danger can be prevented by providing that the patent to be issued shall contain a clause rendering the title inalienable except by consent of the President. This would insure ample security against the abuse of this privilege, as well as necessary protection against improvident sales without adequate consideration.

An extension to the Indians of the benefits of the homestead-laws, under the safeguards mentioned, and such others as the wisdom of Congress may suggest, will greatly facilitate the work of their civilization. It will rapidly break up tribal organizations and Indian communities ; it will bring Indians into subjection to our laws, civil and criminal ; it will induce them to abandon roving habits ; and teach them the benefits of industry and individual ownership, and thus prove highly advantageous in promoting their prosperity.

GENERAL LEGISLATION REQUIRED.

The condition of the Indian population is anomalous, and their relations to the general Government undefined. This is the result of necessity, but the time has arrived when, in the progress of events, it may be remedied. It may not be possible, at present, to devise a system of laws which shall perfectly define the relations between Indians and Government, or that will cure all the defects now existing for want of legislation, but it is possible to remedy many existing evils, and to facilitate the work we have undertaken.

The act of June 30, 1834, "to regulate trade and intercourse with Indian tribes, and preserve peace on the frontiers," is the only general law under which Indian affairs have been conducted. The provisions of this act are entirely inadequate to meet the present requirements of the service, and the experience of the past has shown that they are insufficient for the protection of the Indian. It has been held, for example, by a territorial judge that he has no power, for want of jurisdiction, to try and punish an Indian who murdered one of his race, though the crime was committed in his own district and outside of Indian reservation. No officer of the Government has authority to punish Indians for crimes committed on an Indian reservation. There is no law enforcing obedience to the injunctions or compliance with the requirements of an agent, and hence he is to a great extent powerless unless aided by military authority. Depredations are daily committed by white men upon Indians on their reservations, and the only punishment that can be inflicted is expulsion from the Indian country.

In many instances we have treaty-stipulations requiring annuities of cash and property to be paid to Indians per capita. In some cases the only evidence of such payments consists of receipts given by the chief of the tribes. The improvidence and want of intelligence which characterize most Indians entitled to such annuities, render the payment not merely useless, but absolutely unprofitable; nay, even demoralizing. On receipt of the money or goods, the uncivilized Indian hastens to dispose of his portion for a toy, a trifle, or, what may be worse, spirituous liquors, which render him troublesome and dangerous. In view of these and other examples which could be given, early legislation to remedy such defects in the existing laws is absolutely necessary, and the attention of Congress is seriously and earnestly invited to the consideration of this subject.

The work of civilization will be greatly accelerated by enactment which shall define as far as possible the relations between this race and the Government, which shall furnish authority for enforcing the orders and requisitions of agents, which shall be sufficient to punish Indians for crimes against each other and against white people wherever committed, and which shall also inflict adequate punishment upon white people who trespass upon territory belonging to Indians or commit crimes against them.

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INDIANS.

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INDIAN CITIZENSHIP.

The time has arrived when some general law regulating Indian citizenship is, in my judgment, indispensable. Occasionally, treaty stipulations with Indian tribes are expiring, among whom is found a greater or less degree of civilization. This compels the Department to determine the status of such Indians in regard to citizenship. There are also many who desire to separate from their tribes, adopt the habits and customs of civilized life, and become citizens.

It must also be borne in mind that by our treaties with Mexico we acquired, with the territory then obtained, a large number of Indians. These are, for the most part, Pueblo or Mission Indians, and in either case are to some extent civilized. They are peaceable, inoffensive, and industrious. Before being attached to the United States, many of them were under the care and instruction of Roman Catholic priests. It is claimed that our treaties with Mexico guaranteed these Indians citizenship, because, as is asserted, they were citizens of Mexico previous to the treaty attaching them to this government. They have, however, never been recognized as citizens by the department, but have been treated like other Indian tribes. They have accepted assistance, received agents, and come under the general system of management applied to other Indians of the United States. Hence, the Department has experienced a difficulty in declaring them citizens, by which, among other things, they would become entitled at once to the benefits of our homestead-laws. I am inclined to the opinion that a large number of these Pueblo and Mission Indians are sufficiently intelligent, well-disposed, and industrious to be allowed at once to become citizens, under such conditions and restrictions as Congress may deem it wise to impose. Some of the difficulties herein alluded to will be remedied should Congress adopt the recommendation made in another part of this report in favor of extending, conditionally, the homestead-laws to the Indian population; but the entire subject needs such additional legislation as will comprehend the whole question and provide the necessary conditions upon compliance with which Indians may become citizens.

CATTARAUGUS AND ALLEGANY INDIAN RESERVATION.

This reservation, situated in the State of New York, is encumbered by a claim of a "privilege of pre-emption," known as the right of the Ogden Land Company. This claim has been the cause of considerable embarrassment and great annoyance, and its extinguishment by suitable legislation is very desirable, in order to prevent the future agitation of the question touching the removal of the Indians from the reservation.

KIOWA, COMANCHE, CHEYENNE, AND ARAPAHO TRIBES.

Marauding and predatory parties belonging to these tribes have given the Department serious trouble by their frequent unlawful incursions

into Texas, and rendered a resort to military force necessary. Expeditions, under direction of the proper officers of the Army, have successfully operated against such parties, severely punishing the offenders. The Department is advised that the campaign is drawing to a close, and that these Indians will be brought under complete subjection. In the opinion of the Commissioner of Indian Affairs, so long as they remain upon the borders of the plains where game is accessible, their disposition to lead a roving life cannot easily be overcome. He recommends that measures be adopted for their removal to a tract of country to be procured from the Cherokees, Choctaws, and Chickasaws, where the efforts of the Government to promote their advancement can be more successfully prosecuted. I fully concur with the views of the Commissioner in relation to this subject.

MODOCS.

An agreement was effected with the Eastern Shawnees, dated June 23, 1874, which secured a tract of land as a permanent home for the Modoc Indians in the Indian Territory. It is desirable to confirm this agreement so that the title to the land may be held in trust by the United States for the Modocs.

It will be remembered that these Modocs were transferred from the Pacific coast after the termination of what is known as the Modoc war. Their tribal relations were destroyed, and they were taught by this extinguishment of their nationality that they could not pursue their barbarous practices and escape punishment. This example, I think, will have a salutary influence upon other tribes; certainly, it is producing good results among the Modocs themselves, and it is gratifying to be able to say that they are accepting the situation and conforming to the requirements of the Government with great facility, and are in every way rapidly improving their condition.

The contract with the Shawnees, before referred to, will be submitted to Congress for approval, and it is hoped that it will be ratified without delay.

OMAHAS AND WINNEBAGOES.

The chiefs of the Omaha tribe, on the 31st July, 1874, ceded to the United States, in trust for the Winnebago Indians of Wisconsin, a portion of the Omaha reservation in Nebraska, for which payment was made out of the appropriation provided for the purpose at the last session of Congress. The confirmation of this arrangement, by an act of Congress, is earnestly recommended. Its utility and propriety cannot be doubted.

FREEDMEN AMONG THE CHOCTAWS AND CHICKASAWS.

During the last session of Congress, a letter was addressed by this Department to the Senate Committee on Indian Affairs, inviting atten-

tion to the condition of the freedmen of the Choctaw and Chickasaw Nations. This letter recommended the extension to these freedmen of the privileges of full citizenship among the Choctaws and Chickasaws, and expressed briefly the reasons for such recommendation. The oppressed condition of these freedmen, as well as their habits of industry and their general good behavior, induce me to invite the attention of Congress, through you, to this subject, and to repeat the recommendations contained in the letter referred to.

TREATY WITH SIOUX INDIANS.

This treaty, concluded April 29, 1868, (15 Stat., 639-640,) may be regarded as having laid the foundation for the civilization of the wild and intractable Sioux tribes. The sixteenth article of this treaty stipulates that the country north of the North Platte River and east of the summits of Big Horn Mountains shall be considered as unceded Indian territory; that no white person shall be permitted to settle upon or occupy any portion of the same, or, without the consent of the Indians first obtained, to pass through the same. A large portion of the territory embraced within this provision is in the State of Nebraska, and the time has arrived when it should be open to settlement and cultivation by the white man. It is not needed for Indian purposes, nor is it desirable that it should be longer considered and held as unceded Indian territory. The eleventh article of the same treaty secures, to the Indians who were parties to it, the right to hunt on any lands north of the North Platte and on the Republican Fork of the Smoky Hill River, so long as the buffaloes range thereon in such numbers as to justify the chase. It is not believed that buffaloes range any longer on the territory thus described in numbers sufficiently large to justify the chase, nor is it desirable that these Indians should longer enjoy the privilege of hunting buffaloes within this territory. To effect a modification of this treaty with the consent of the Indians, a commission was appointed to negotiate with them for the relinquishment of these rights and privileges. The same commission were charged with the duty of finding, if possible, a new location for the Whetstone or Spotted Tail agency. Various causes have arisen to retard the successful prosecution of the first duty assigned to these commissioners. It is believed, however, that with the aid of an appropriation made by Congress at the last session, to be used in inducing the Indians to consent to the modification of the two articles of the treaty before referred to, their consent will yet be obtained. It is probable that in strict law the Indians have forfeited their right to hunt as secured by the terms of the treaty, by their frequent violation of its stipulations. It is better, however, that the treaty should be modified with the consent of the Indians than to have it done by the decision of the Department, to which they may not willingly consent.

SIOUX.

The most numerous, warlike, and uncivilized Indians are the Sioux, who inhabit the Territory of Dakota. The efforts to bring them upon reservations, though attended with difficulty, have, to a great extent, been successful. The Sioux, excepting two bands, have been enrolled at eleven agencies, where they receive subsistence. Those not enrolled are frequently troublesome, making predatory visits to agencies to procure food, where their presence and conduct tend to demoralize those who, in compliance with the wishes of the Government, have remained permanently at their respective localities. The unproductive soil and the severity of the winter-season in Dakota and Montana seriously embarrass all attempts to improve the condition of the Indians by agricultural labor or stock-raising in those Territories. Their attention has been invited to the Indian Territory, where both climate and soil are so favorable for the production of everything necessary to sustain and make them comfortable. The effort, however, to induce them to occupy a portion of said Territory has thus far been unsuccessful. Time, I think, will ultimately overcome their objections, as well as their naturally strong attachment to the location of their ancestors.

The Indians belonging to the Sioux agencies along the Missouri River, where good land is to be found, have already been induced to make fair beginnings in the cultivation of the soil, and, by manual labor, will gradually improve their condition and become self-sustaining.

The experiment of providing Indians, partially civilized, with stock-cattle has been tried during the past year at some of the agencies, and the result has fully met the expectations of the Department. Applications have been made by Indians of other agencies to be similarly provided, and a compliance with this request I deem advisable.

The Sioux located near the Missouri will, by the means now employed for their improvement, in the opinion of the Commissioner of Indian Affairs, soon reach a condition of civilization that will no longer make their proximity to white settlements a cause of apprehension. The country occupied by them, however, does not contain sufficient resources for the supply of all their wants, and they must, for some time to come, rely upon the Government, to a certain extent at least, for aid. It must be observed that such a reliance is in itself an impediment to their progress in civilization, and hence the importance of removing these Indians, as well as the great number of Sioux in Montana and Dakota, above referred to, to the Indian Territory at the earliest possible moment, where they will soon become wholly self-sustaining.

INDIAN LANDS IN KANSAS AND NEBRASKA.

Attention is invited to the report of the Commissioner of Indian Affairs in regard to the action taken by the Department in relation to the disposition of Indian lands in Kansas and Nebraska. To carry out

the provisions of the act of June 10, 1872, relating to the Nebraska lands, further legislation is necessary, and such recommendations will be made to Congress, at the ensuing session, as are considered desirable on this subject.

COMMISSIONS.

The legislation of Congress at the last session required the appointment of commissioners to visit different sections of the country to investigate various matters pertaining to Indian affairs. Their several reports are embraced in the report of the Commissioner, and attention is invited to them.

BLACK HILLS.

The military reconnaissance of the Black Hills country was regarded by the Indians as a violation of their treaty, and produced a turbulent feeling among them. Its objects, however, were peaceably accomplished. Extravagant statements concerning the mineral wealth of this country created great excitement among the people, and exploring parties were organized for the purpose of prospecting the country. Subsequent information establishes the fact that no evidence of valuable mineral deposits was furnished, and that the lands in that region are undesirable for cultivation and settlement by white men. Notwithstanding this, organized parties have attempted to explore it, and have been attacked and repulsed by the Indians. It is apprehended that efforts will be made to induce legislation for the extinguishment of the Indian title to the Black Hills country, and to bring the land into market. It is hoped that such efforts will be without success, because of the general unfitness of the country for settlement, and because any attempt to dispossess the Indians, at present, of a region of country upon which they located for security against the encroachments of the white man would meet with violent and determined resistance.

AGENCY IN THE BLACK HILLS.

The establishment of an agency in the Black Hills country was recommended during the last session. Subsequent events have demonstrated the propriety of this recommendation and the necessity for such an agency in order to enable the Department to provide for the Sioux known as the wild and non-treaty Indians. Such an agency will do more to prevent their predatory incursions to the agencies now established, and to check their inclination to depredate upon white settlements, than any other measure which has presented itself to the consideration of those in charge of this subject.

I desire to invite special attention to the full and able report of the Commissioner of Indian Affairs, which presents in detail the operations of the Indian Bureau during the past year, and the general management of the various tribes of Indians under the charge of the respective superintendents and agents, to whose reports the Commissioner refers for "flat-

tering evidences of advancing civilization among nearly all the different tribes, and a growing general disposition to peace and good-will toward the Government."

The Commissioner has classified the Indians as follows: First, wild and refractory tribes, who are only attracted to Indian agencies by the subsistence furnished by the Government; second, those who appreciate the necessity for manual labor, and are willing to follow the advice of the Government, and receive instruction from agents in the work of civilization; and, third, those who hold lands and own stock and implements pertaining to the various branches of agriculture. In regard to the first class, the Department has gratifying evidence that during the past year they have submitted, to a great extent, to the influences intended to reclaim them. Hostile Indians, owing to the presence of troops at various agencies, and to the effective military operations against them, have become submissive, and this fact, added to the dissensions existing among themselves, will, in the opinion of the Commissioner, render the occurrence of a general Indian war impossible. It is not anticipated, therefore, that the employment of so large a military force as has been required during the past year will be necessary hereafter. Indians embraced in the second class are generally abandoning their barbarous customs and yielding to civilizing influences. Their number has during the year been largely increased. The hope is therefore entertained that their condition will rapidly improve, provided Congress shall legislate in their behalf so as to continue the present policy. The third class embraces tribes recognized as civilized Indians, who have been aided in attaining their present condition by direct moral influences and religious instructions.

INDIAN TERRITORY.

Attention is again invited to the present condition of the Indian Territory, over which some form of government should be established for the protection of its inhabitants.

The efforts of the Indians to organize a government which will enforce law and give security to person and property have thus far totally failed, and the lawlessness and violence that prevail in that Territory call for immediate legislation. At present it is a resort for lawless men and criminals, who take refuge thus in order to avoid the restraints incident to an efficient government, or to escape the penalties due for crimes elsewhere committed. These refugees from justice are a constant source of trouble among the Indians, and render it impossible to carry on successfully the civilizing policy of the Government. Nothing short of a territorial government will be likely to attain the objects so much to be desired; but if it is impossible to establish such a government, the next most desirable thing, in my judgment, is the establishment of Federal courts within this Territory, supported by such a number of marshals as shall be equal to the difficulties to be encountered. Possi-

bly something like obedience may be secured in this way, if nothing better be suggested; but without some legislation in this direction the condition of things must necessarily continue to grow worse with each succeeding year. Excursions of white men into this country, in order to depredate upon the property of Indians, stealing and carrying off ponies and cattle, are very frequent, and yet there is no authority adequate to the prevention of such crimes.

This subject is of such vital importance to the work of Indian civilization as to constrain me to express myself as strongly in favor of immediate action by Congress as propriety will permit.

BOARD OF INDIAN COMMISSIONERS.

This board has not yet made its annual report, and I am, therefore, unable to refer in detail to its operations during the past year. As soon as the report shall have reached me, copies will be duly transmitted to the Executive and to the proper committees of each branch of the national legislature. I have no doubt of the efficiency and fidelity with which all the members of the board have co-operated with the Department in the work assigned to them, and take pleasure in saying that it is a source of encouragement and strength to feel assured that the Department will have, in the future, the benefit of their advice and co-operation.

PUBLIC LANDS.

During the fiscal year ending June 30, 1874, public lands were disposed of as follows:

	Acres.
Cash sales	1,041,345.46
Military-warrant locations	133,160.00
Homestead entries.....	3,518,861.63
Timber-culture entries.....	803,945.47
Agricultural-college scrip locations	112,932.98
Approved to States as swamp.....	202,187.91
Certified to railroads	3,264,314.42
Certified for wagon-roads	57,921.11
Certified for agricultural colleges	114,289.18
Certified for common schools.....	69,899.84
Certified for universities.....	64,636.52
Approved to States for internal improvements	134,986.70
Sioux half-breed scrip locations	720.00
Chippewa half-breed scrip locations.....	11,671.71
Total	<hr/> 9,530,872.93

a quantity less by 3,499,733.94 acres than that disposed of the preceding year.

The cash receipts were \$2,469,938.50, a sum less by \$938,577 than that received the preceding year.

During the year 29,492,110.43 acres were surveyed, making, with the quantity previously surveyed, 649,393,052 acres, and leaving yet to be surveyed 1,185,605,348 acres.

It is worthy of notice that the diminution in the aggregate quantity of lands disposed of the last fiscal year, as compared with the year before, is found chiefly in the amount certified to railroads; 3,264,314.42 acres in the year ending June 30, 1874, against 6,083,536.57 acres in that ending June 30, 1873. Nearly a million acres were entered under the timber act, which augurs well for the now treeless prairies of the West. The entries under this and the homestead act exceed by over half a million acres like entries during the preceding year. Such entries, being made for actual use, are the surest criterion of the progress of the country.

TIMBERED LANDS.

I invite special attention to the well-considered and judicious observations of the Commissioner of the General Land-Office touching the present system of disposing of timbered lands, or, as he terms them, "pine lands."

The rapid destruction of timber in this country, and especially that which is found on the public lands, is a source of great solicitude to all persons who have given the subject any consideration. If this destruction progresses in the future as rapidly as in the past, the timbered lands of the Government will soon be denuded of everything that is valuable. Effective legislation protecting these lands from such waste is absolutely necessary, and cannot longer be neglected without serious injury to the public interests. The proper limits of this report forbid the introduction of such statistics as might easily be furnished establishing beyond controversy the correctness of this statement.

The recommendations of the Commissioner are, that pine and fir lands shall not be subject to entry under the pre-emption and homestead laws; that a system of surveys be devised by which the quantity of pine and fir timber on each smallest subdivision of a section may be at least closely approximated; that an immediate exploration by experts of the unsurveyed portion of those States and Territories known to contain pine and fir timber be made, with a view of ascertaining the geographical situation of such districts; that the reports of such explorations be followed by immediate surveys, appraisements, proclamations, and sales, at not less than the appraised value, and for cash only.

Under the laws now in force for the disposition of public lands, it is difficult, if not impossible, to obtain more than the minimum price (\$1.25 per acre) for land, however valuable. When timbered lands are advertised for sale, private parties, desiring to purchase, make such arrangements and combinations as to prevent competition; hence the lands, if disposed of at all, are sold at the minimum when offered at public sale, and, if not then sold, are immediately entered at the minimum Government price by such parties. The most effectual means of preventing these practices is, in my judgment, to adopt the suggestions of the Commissioner regarding the survey and appraisal of these lands, and when

they are offered at public or private sale to make the appraised value their minimum.

These observations are intended to apply to all the timbered lands owned by the Government, embracing the pine lands east of the Rocky Mountains, and the pine, fir, and redwood lands on the Pacific coast.

Unless some other system to attain the same object more effectually and satisfactorily can be devised, I commend these suggestions to the favorable consideration of Congress, feeling confident that great benefit to the country will result from their adoption.

The propriety of so amending the homestead act as to permit citizen Indians to avail themselves of its provisions has been discussed and strongly recommended by the Commissioner of the General Land-Office. I fully concur in the opinion expressed by that officer on this subject, and my reasons for this are found at length in this report, under the head of "Indian Affairs."

I would respectfully commend to the favorable consideration of Congress the suggestions of the Commissioner concerning the expediency of repealing the law which requires claimants of confirmed private land-claims to defray the expense of the survey of their claims; concerning the consolidation of the homestead and pre-emptions laws; and concerning the urgent necessity of reorganizing and increasing the clerical force of his Office.

SAN JUAN AND OTHER ISLANDS.

Pursuant to the authority vested in you by the first section of the act approved on the 20th of June last, you appointed, on the 23d of September last, a commissioner to make and report to this Department a list of all British subjects who, on the 15th day of June, 1846, were in the occupation of land, lawfully acquired, within the limits which were the subject of the award of His Majesty the Emperor of Germany, together with a description of the land actually occupied by each at said date. Instructions for the guidance of the commissioner in the performance of his duties have been prepared and forwarded to him. At the last session of Congress an appropriation of \$1,000 was made to meet the expenses of this commission. This sum, it is believed, will prove to be entirely inadequate. This commission is an important one. It will consume considerable time and require the necessary employment of much clerical labor in order to collect and record the evidence touching the rights of such persons as shall claim lands under the award made by His Majesty the Emperor of Germany. I therefore recommend such additional appropriation as, in the judgment of Congress, may be deemed necessary, suggesting that, in the opinion of the Department, the further sum of \$1,500 will at least be required.

PATENTS.

The operations of the Patent-Office during the year ending September 30, 1874, show a large increase over those of the preceding year.

The number of applications, inclusive of re-issues and designs, was 21,077, of which 13,545 were allowed; 229 applications for extensions were filed, of which 208 were granted, and 2,680 patents were allowed, but not issued, on account of failure to pay the final fees. Six hundred and ninety-six applications for trade-marks and labels have also been filed, of which 583 were granted registration. The total amount of fees received was \$721,111.35, and the total expenditures were \$694,075.72, leaving a balance of \$27,035.63, a sum greater by \$24,858.60 than that of the preceding year.

The Commissioner is of opinion that the prompt publication in the Official Gazette of abstracts of all patents issued has resulted in preventing many fruitless applications for inventions already patented, by giving to the public accurate information as to the character of the patents granted. The yearly volumes of the Patent-Office reports have heretofore contained only an index of the patents issued during the year covered by the report, and, consequently, a great deal of perplexing and often ineffectual labor in searching for patents has been rendered necessary. To remedy this, the Commissioner has, during the past two years, caused an accurate general index to be prepared of all patents issued from the year 1790 to 1873 inclusive. This index will be published in two sets, one containing the subject-matter of the patent and the other the name of the inventor or patentee.

The reproduction of drawings, old and new, in the Patent-Office, so far as the work is completed, has resulted in great advantage to persons having business before it, and to the courts, as well as in a saving of at least 20 per cent. in the labor of the examining corps. The Commissioner recommends a special annual appropriation of at least \$100,000, for two or three years, for the purpose of finishing the reproduction of old drawings. If this work shall be completed, it is estimated that the sale of copies will soon re-imburse the Treasury, and subsequently be a source of revenue. Without this appropriation, a considerable increase in the force of the Office will be required. Should it be made, however, the present examining corps will probably suffice for many years. This recommendation has the unqualified approbation of the Department.

The Commissioner also urges that a special appropriation be made for the preparation of complete digests of all patents granted by the United States, as classified in the Patent-Office. In order to examine intelligently new applications, it is necessary to ascertain what is contained in each previous application or patent belonging to the same subject or class, and, as there are now nearly 300,000 applications, patented and unpatented, the great amount of labor involved is apparent. It is obvious, therefore, that complete digests of the character referred to would greatly economize such labor, and be valuable in securing greater accuracy in the granting of patents. I cordially commend the subject to your favorable consideration.

The Commissioner again invites attention to the immediate necessity for additional room for his Office, as the space allotted to it is entirely inadequate. The increasing business of the Patent-Office has, in the last few years, so crowded the building as to seriously embarrass the proper discharge of its duties. The files, models, and drawings of the Patent-Office must of necessity be kept in such condition as to be easy of access, but, at present, great inconvenience is experienced by the public as well as by the employés of the Office from the want of room in which to arrange such files, &c., for convenient reference and examination.

PENSIONS.

The statistics furnished by the report of the Commissioner of Pensions indicate that the maximum number of pensioners on the bounty of the Government has probably been reached. This conjecture is based upon the fact of a decrease, during the last fiscal year, of 2,170 names in the roll of pensioners, whereas, during the seven fiscal years immediately preceding, the roll was steadily increased at an average annual rate of 16,000 names. On the 30th of June, 1873, the names of 238,411 pensioners were borne upon the roll, and during the ensuing year 10,496 names were added thereto, and 12,656 dropped therefrom, for various causes, leaving 236,241 names on the roll June 30, 1874, whose annual pensions aggregate the sum of \$26,254,071.10. Of this number 102,457 were Army invalids, and 107,516 Army widows and dependent relatives, a total of 209,973 Army pensioners; 1,551 Navy invalids, and 1,785 Navy widows, &c., a total of 3,336 Navy pensioners; and 17,620 survivors, and 5,312 widows of the war of 1812; a total of 22,932 pensioners of the war of 1812; in all 236,241. The net decrease during the year in the number on the rolls is 2,170, as before stated, while the net decrease in the annual aggregate payment is only \$5,645.13. This seemingly inadequate amount is explained by the fact that many pensions have been increased during the year pursuant to recent legislation.

During the last fiscal year there were examined and allowed 30,133 Army pension-claims, of which 5,758 were for invalid pension, 8,063 for increased pension to invalids, 3,051 for pension to widows, dependent relatives, &c., 12,932 for increased pension to widows, &c., and 329 for restoration; 734 Navy pension-claims, of which 196 were for invalid pension, 126 for increased pension to invalids, 107 for pension to widows, dependent relatives, &c., 286 for increased pension to widows, &c., and 19 for restoration; and 1,384 claims for pension of survivors and widows of soldiers in the war of 1812, of which 813 were of the latter class; making a total of 32,251 claims, adjudicated at an aggregate annual rate of \$1,856,986.

The following amounts were paid on account of pensions during said year: To Army invalids, \$10,853,367.86; to Army widows and dependent relatives, \$16,993,835.95; to Navy invalids, \$174,185.36; to Navy

widows, &c., \$367,511.04; to survivors of the war of 1812, \$1,588,832.95; and to widows of soldiers in said war, \$616,016.40; making a total amount, including the expenses of disbursements, of \$30,593,749.56, which is an increase of \$1,408,459.94 over the amount paid the preceding year. The Commissioner is of opinion that the disbursements to invalid pensioners will, for the current fiscal year, differ little in amount from those of the last year, but anticipates a considerable reduction in the payments to widows and minor children.

At the close of the year there were on file unadjusted 61,660 pension claims, of which number 27,114 were for invalid pension; 33,026 those of widows, dependent relatives, &c., and 1,520 of survivors and widows of soldiers of the war of 1812. This is an actual increase, during the year, of 6,113 pending (or unadjudicated) claims; but, in order to reconcile an apparent discrepancy between these figures and those given in the last annual report of the Department, an explanation is necessary. During several years past many applications for pension, which had been placed on the files of rejected and abandoned claims, have been included in the reports of the Commissioner of Pensions to this Department among the number of pending claims, but it has been deemed proper to regard, now and hereafter, such claims as belonging to the rejected class, for it is believed that very few of them will ever be called up for prosecution. These claims are, therefore, omitted in the present report, and the figures above given (61,660) accurately state the number of pending claims on the 30th of June last.

At the close of the year there were borne on the rolls the names of 410 widows of soldiers in the revolutionary war, and of 1,057 widows and children of soldiers who served in wars subsequent to the Revolution, excepting that of 1812 and prior to the late rebellion.

During the last fiscal year 234 bounty-land warrants were issued for 35,640 acres, being 16,520 less than the number of acres issued for the preceding year. There are now upon the files of the Pension-Office about 100,000 suspended claims for bounty-land, of which number only 350 were prosecuted during the year. The Commissioner states that, in his judgment, the existence of so large a number of suspended claims for bounty-land tends to the fabrication of testimony by unscrupulous parties, for the purpose of securing the allowance of claims which are inadmissible upon the evidence filed. The latest act of Congress granting bounty-land has been in force for nearly twenty years, a sufficient period within which all who are entitled thereto should have availed themselves of its provisions. There is no existing legal limitation during which proof in support of such claims must be filed, and hence it cannot be said that a claim for bounty-land is rejected unless the record-evidence is incontrovertibly adverse to its admission. It may be disallowed, but the claimant is at liberty to file additional testimony at any time and have the claim re-opened. These claims are

consequently termed "suspended," no better word having been suggested to express their exact condition.

I therefore recommend that, by appropriate legislation, a limited period be prescribed during which the several acts of Congress granting bounty-land shall remain in force. Such legislation would, I am satisfied, work no injustice to those who may have just and equitable claims, and would render impossible those fraudulent practices which are, under existing laws, so difficult of detection and prevention.

The medical division has rendered valuable service in solving the various medical questions that arise in the adjudication of claims for pension, and in examining and revising the certificates of examining surgeons, in order that the disabilities described therein may be equitably rated. The roster of examining surgeons, now numbering 1,440, is constantly undergoing changes with a view to greater efficiency in its composition, and the efforts of the medical referee to insure among its numbers a more intelligent apprehension of their duties have met with marked success, the general character of their certificates being much improved as compared with former years. The Commissioner is of opinion that the present scale of fees allowed by law for an examination by a surgeon is inadequate to secure the necessary medical ability for this branch of the service. He recommends, therefore, that, by appropriate legislation, the fee for an ordinary examination be fixed at \$3, and for one requiring special skill, the use of scientific appliances, &c., at \$5.

Important service in the detection and preventing of fraud upon the Government has been performed by special agents of the Bureau, and through their efforts a sum thrice as much as the appropriation made for the purpose has been directly saved to the Treasury.

It is estimated that \$30,500,000 will be required for the pension service during the fiscal year ending June 30, 1870.

The Commissioner again invites attention to the necessity for a re-organization of the clerical force of his Office. The subject was referred to in my last annual report, and is again recommended for favorable consideration.

A gratifying feature disclosed by the Commissioner's report, and one to which special attention is invited, is that we have probably reached the maximum number of pensions under existing legislation. This presumption is based upon the fact that, while the pension-roll has sustained during several years prior to June 30, 1873, an average annual increase of 16,000 names, it was diminished by 2,170 names during the last fiscal year. In addition to this fact, it is reasonable to infer that, of the unadjudicated claims now on file, (although the number has been considerably increased during the year,) the proportion allowed will annually diminish, and that the rate of mortality among those now pensioned must naturally increase with each advancing year. It also appears that the pensions of 96,377 minor children, whose names are now on the

roll, will shortly cease. The Commissioner's report shows that, of this number, the pensions of 8,512 expire during the present calendar year; 15,917 will expire in 1875; 17,539 in 1876; 18,306 in 1877; 15,391 in 1878; and of the remainder, 20,712, will terminate soon afterward. These facts and considerations justify the opinion that the maximum annual expenditure for pensions has been reached, and that there will be an annually increasing diminution therein.

EDUCATION.

The report of the Commissioner of Education for 1874 is prepared on the method of its several predecessors, so universally approved by those in charge of systems and institutions of education. It shows an increase in the amount of work accomplished, while the clerical force is still inadequate; that, although the year has been one of considerable progress, the advanced movements of education have, in many cases, encountered special manifestations of antagonism, and that some of the most thoroughly established methods have been vigorously challenged to show reasons for their adoption and maintenance at public expense. The demands upon the Office, arising from this cause, have greatly increased its labors, and show that the summary of experience contained in the annual reports has been prepared none too soon to supply the data necessary to sustain the efforts for the support of all well-tested principles and methods. The call upon the Office from foreign countries shows steady increase, and is gratifying as indicating the world-wide interest in republican institutions.

The Commissioner reports the continuance of discouraging circumstances encountered and unfavorable anticipations generally expressed by the friends of education in the States in which slavery has been lately abolished. He holds that the unsettled condition of affairs in these States can only be effectually remedied by the universal education of the people, so that, in the guidance of their conduct, conscience, intelligence, and reason may take the place of ignorance, passion, and prejudice. In view of the difficulty of meeting the required expenditure for schools in these sections, the Commissioner recommends the setting apart of the proceeds of the sale of public lands to be distributed, temporarily, among the several States, on the basis of the illiteracy of their respective populations as shown by the last census.

The Commissioner invites attention to the proposition, generally favored among educators of the country, to make a special effort to bring forward at the Centennial Exhibition of 1876 such representations as they are able to make of the relations borne by education, present and historical, to the progress of our prosperity and the perpetuity of our institutions. He finds from various quarters great demand that the Office should co-operate in the preparation of the necessary materials for this representation, and submits the question whether or not means shall be furnished the Office for undertaking the work.

The favor with which the work of the Office is received by all laborers and inquirers in the field of education furnishes the most satisfactory evidence of their belief that the nation has something to do in the way of aiding, though not controlling, the primary and most essential interest of its citizens; and that this agency for the collection and dissemination of information in regard to the experiences, the successes, and the failures of our many and diverse systems and methods should receive the favorable consideration and liberal support of Congress.

CENSUS.

The annual report of the Superintendent of the Census will contain only a statement of the number and amount of claims against the United States for services rendered in taking the eighth and ninth censuses which have been adjusted and paid during the year; and, also, a copy of a letter written by him on the 30th of January, 1874, relative to the proposed census of 1875, a copy of which was transmitted by this Department, on the 3d day of the following month, to the sub-committee on census of 1875 of the House of Representatives. The recommendations contained in the two last annual reports of this Department in reference to such a census are respectfully renewed.

RAILWAYS.

The subscriptions to the stock of the Union Pacific Railroad Company amount to \$36,783,000, of which \$36,762,300 has been paid. The receipts for the year ending 30th June, 1874, from the transportation of passengers were \$3,749,998.12; of freight, \$5,672,724.01; and from miscellaneous sources, \$824,038.03; total, \$10,246,760.16. (These figures include "amounts earned for, and withheld by, the United States, for transportation of its passengers, freight, and mails.") The expense of operating the road for the year has been \$5,089,789.17, leaving net earnings \$5,156,970.99. The entire cost of the road and fixtures to 30th June, 1874, was \$112,427,277.46. The total bonded indebtedness of the company is shown to be \$75,261,512, of which \$27,236,512 is due to the United States. The "floating debt" (not including the company's note for \$2,000,000, issued to the "Hoxie contract") is \$2,234,873.62, and "sterling loans" £20,000.

The amount of stock of the Central Pacific Railroad Company subscribed is \$62,608,800, of which \$54,275,500 has been paid. The receipts for the year ending 30th June, 1874, from transportation of passengers were \$4,389,718.52; and of freight, \$7,638,773.93; total, \$12,028,492.45. The operating expenses of the road for the year were \$4,816,082.40, leaving net earnings to the amount of \$7,212,410.05. At the close of said year the indebtedness of the company amounted to \$85,673,181.75, of which \$27,855,680 was to the United States. This company embraces, by consolidation, (besides the original Central Pacific Company,)

the Western Pacific, the California and Oregon, the San Francisco, Oakland and Alameda, and the San Joaquin Valley Companies.

On the 30th of October, 1869, a board of eminent citizens, appointed pursuant to a joint resolution of Congress, reported that the sum of \$2,162,750 would be necessary to supply deficiencies in the Central Pacific and Union Pacific roads. Mr. Secretary Cox accepted their report and made it the basis of the adjustment of the land-grants to said companies. He directed half the lands inuring to them under acts of Congress to be withheld until these deficiencies should be supplied. Commissioners appointed during the current year have re-examined the roads and reported the deficiencies supplied. Pursuant to your direction, Mr. Secretary Cox's order has been revoked, and the lands due the companies will all be patented to them.

Stock of the Central Branch Union Pacific Railroad Company was subscribed to the amount of \$1,000,000, of which \$980,600 was paid. The receipts for transportation of passengers for the year ending 30th June, 1874, were \$44,080.36; and for freight, \$84,407.71; total, \$128,488.07. The actual amount expended on said road for the year is \$147,918.43. The cost of the road and fixtures has been \$3,763,700. The company's indebtedness (in addition to the first-mortgage bonds, \$1,600,000, and the Government loan, \$1,600,000) is \$308,966.96.

The amount of stock of the Kansas Pacific Railway Company subscribed is \$9,992,500, and the amount paid in is \$9,689,950. Total amount of stock allowed by law, \$10,000,000. The receipts for the transportation of passengers for the year ending 30th June, 1874, are \$1,363,090.99; for freight during the same period, \$1,982,060.69; miscellaneous earnings, \$64,184.50; total, \$3,409,336.18. The cost of construction and equipment of six hundred and thirty-nine miles of main line and thirty-three miles of branch line (six hundred and seventy-two miles) has been \$34,359,540.66. The total funded debt of the company is \$27,301,600, of which \$6,303,000 is due the United States. Other liabilities and indebtedness, \$3,126,235.99; total, \$30,427,835.99.

Stock of the Sioux City and Pacific Railroad Company to the amount of \$4,478,500 has been subscribed, of which \$1,791,400 has been paid in. The receipts for the year ending 30th June, 1874, from the transportation of passengers, were \$84,922.85; of freight, \$209,722.02; from express, \$3,008.98; and from miscellaneous sources, \$22,165.27; total, \$319,819.12. The expenses during that period were \$263,703.52, leaving net earnings \$56,115.60. The indebtedness of the company is \$3,387,210.99, of which \$1,628,320 is due to the United States. This road commences at Sioux City, Iowa, and extends to Fremont, Nebr., where it intersects the Union Pacific Railroad, a distance of 101.77 miles.

At the close of the year ending 30th June, 1874, the amount of subscribed stock of the Southern Pacific Railroad Company of California was \$15,429,200, of which \$14,071,100 was paid. The cost of surveys,

up to the end of said year, has been \$125,043.40. The amount received for transportation of passengers was \$512,637.53; of freight, \$536,050.58; total, \$1,048,688.11. The expenses of the road and its fixtures for the year were \$478,647.48, leaving net earnings \$570,040.63. The indebtedness of the company is \$11,000,000. You accepted the fifth section of this road on the 9th of May last; and, on the 26th instant, an additional section of twenty miles, making the total number of miles accepted 160.26.

Stock of the Atlantic and Pacific Railroad Company, to the amount of \$19,760,300, has been subscribed and paid in. The road is completed from Pacific, Mo., to Vinita, Ind. T., a distance of three hundred and twenty-seven and a quarter miles. The expense of additional equipment within the last fiscal year has been \$726,665.63. The lease of the Saint Louis, Lawrence and Denver Railroad by this company on the 29th June, 1872, for a period of nine hundred and ninety-nine years, has, by mutual agreement, been canceled. The cost of the surveys to 30th June, 1874, was \$323,927.36. The amount received from passengers on the Atlantic and Pacific division was \$272,011.26; on the Pacific Railroad of Missouri and leased-lines division, it was \$1,005,062.29; total, \$1,277,073.55. The amount received from freight on the Atlantic and Pacific division was \$949,763.15; on the Pacific Railroad of Missouri and leased-lines division, \$2,665,498.17; total, \$3,615,261.32; entire receipts, \$4,892,334.87. The cost of the Atlantic and Pacific Railroad and fixtures to 30th June, 1874, was \$37,250,732.36. The running-expenses of the road from 30th June, 1873, to 30th June, 1874, were \$642,091.80, and the same expenses of the Pacific Railroad of Missouri and leased lines during said period were \$2,201,308.31; total expenses, \$2,843,400.11. The indebtedness of the company is as follows: Bonded debt of the South Pacific Railroad Company, secured by mortgage of lands assumed by this company, \$7,190,000; Atlantic and Pacific company's bonds, dated July 1, 1868, (twenty years,) \$2,840,000; same company's Central division first-mortgage railroad and land-grant bonds, dated November 1, 1871, \$1,195,500; same company's Central division land-grant bonds, dated November 1, 1871, \$795,000; same company's second-mortgage railroad and land-grant bonds, dated November 1, 1871, \$1,189,500; same company's equipment bonds, dated June 27, 1873, \$753,000; same company's 6 per cent. bonds, dated December 1, 1873, \$1,149,800; (and scrip outstanding, \$513,946.81;) 6 per cent. income-bonds, dated December 1, 1873, \$375,300; land-debentures, dated January 1, 1874, \$12,000; total bonded indebtedness, \$15,500,100; floating indebtedness, \$2,478,029.82; entire indebtedness, \$17,978,129.82. Assets of cash debts due company, and securities other than of this company, amounting to \$1,861,431.29, on hand.

Stock of the Northern Pacific Railroad Company (as shown by last report) to the amount of \$100,000,000 has been subscribed, and certificates for 202,326 shares, of \$100 each, have been issued. The main line

of the road has been built and is now in daily operation from Du Luth, on Lake Superior, westward to Bismarck, on the Missouri River, a distance of four hundred and fifty miles, and from Kalama, on the north side of the Columbia River, in the Territory of Washington, northward to Tacoma, on Commencement Bay, Puget Sound, a distance of one hundred and five miles. The cost of the surveys of the lines of the road, including necessary purchase of right of way, has been \$1,108,893.75. The extent of lines surveyed is 9,388 miles, and, in addition, 2,350 miles of river reconnaissance. When the final locations shall have been made, the number of miles surveyed will be about 12,000, and the cost of the surveys will aggregate about \$1,500,000—equal to \$125 per mile. The company owns, by purchase, an equal half of the Lake Superior and Mississippi Railroad, from Du Luth to the junction with the Northern Pacific Railroad, a distance of twenty-four miles. In 1873 the road was definitely located west of Bismarck from the mouth of Heart River, a tributary of the Missouri, to the mouth of Glendive Creek, a tributary of the Yellowstone, a distance of two hundred and five miles. This portion of the line has been made ready for construction, and bids have been received, after public notice, for clearing, grubbing, grading, and bridging the entire distance. The company's report states that it is safe to estimate that the next two hundred and five miles of road west of Bismarck can be constructed at a maximum cost of \$20,000 per mile, if paid for monthly and in cash. The precise point at which the road will cross the Missouri River has not yet been fixed, but it is considered safe to assume that a bridge can be erected, without great cost, within two miles of and above Fort Abraham Lincoln, at which point the river is about 3,500 feet wide. West of the mouth of Glendive Creek, and east of the junction of the Deer Lodge and Blackfoot Rivers, all in Montana Territory, the line has not been definitely fixed. The location will, however, probably be made along and up the right (south) bank of the Yellowstone as far as a point opposite the mouth of Porcupine Creek, a distance of two hundred miles from the mouth of Glendive Creek. From the mouth of the Porcupine, on the Yellowstone, to the junction of the Deer Lodge and Little Blackfoot Rivers, a distance of about three hundred and fifty miles, the location of the line has not been decided on. The hostility of the Indians constitutes an obstruction to engineering work. The amount received from the transportation of passengers on the road (in both the Pacific and Minnesota divisions) for the last fiscal year was \$250,878.73; from freight transportation for same period on said divisions, \$737,252.67; total, \$988,131.40. The expense of the road and fixtures has been: for surveys, \$1,108,278.52; construction, including docks and wharves, \$14,446,356.54; auxiliary and connecting rail and water lines, \$2,728,980.09; equipment, \$2,434,346.25; general expense, including officers' salaries, traveling expenses, taxes, rent, attorneys' fees, &c., \$635,454.71; total, \$21,353,416.11. The indebtedness of the company is as follows: first-mortgage bonds, (dollar,) [redacted]

\$28,847,600; first-mortgage bonds, (sterling,) \$1,250,000; bills payable, \$702,293.36; accounts payable, \$75,442.20; bonds and scrip issued to fund interest, \$683,304; total, \$31,558,639.56. On the 1st December last you accepted a section of 196.4 miles of this road, and on the 12th of May of the present year a portion of 40.1 miles, making a total number of miles approved 529.41.

December 5 last I accepted the southern division of the Cairo and Fulton Railroad, (125.96 miles,) commencing at the Arkansas River, (Little Rock,) and ending at the Red River, (Fulton;) also, the first twenty-five miles, lying immediately south of the boundary-line between the States of Missouri and Arkansas.

The amount of stock of the Texas and Pacific Railway Company authorized by law is \$50,000,000; capital stock issued: scrip-stock for partial payments on account of subscriptions, \$600,000; full-paid stock, \$1,000,000; total, \$1,600,000. The indebtedness of the company is as follows: first-mortgage 6 per cent. gold construction bonds issued, \$9,210,000; first-mortgage land-grant 7 per cent. currency bonds issued, \$9,251,000; floating debt, \$2,207,444.45; debt of the Southern Pacific Railroad Company to the State of Texas, assumed by the Texas and Pacific Company, \$204,964.69; total, \$22,473,409.14. The receipts from the transportation of passengers for the year ending 30th June, 1874, were \$269,488.86; of freight, \$572,453.13; from express, \$6,906; United States mail, \$14,318.63; from telegraph, \$420.17; and from miscellaneous sources, \$8,394.83; total, \$871,981.62. The expenditures for same period were: for conducting transportation, \$184,973.22; motive power, \$172,133.51; maintenance of way, \$239,794.07; maintenance of cars, \$54,357.06; general expenses, \$39,474.56; total, \$690,732.42; for current construction—improving road, widening gauge, ditching, grading, &c.—\$336,319.58. There are three hundred and twenty miles of this road now in operation; one hundred and forty-six and nine-hundredths miles (from Marshall to Dallas, Texas,) have been completed and accepted since last report; one hundred and seven miles are graded, bridged, and tied, ready for the iron. The company's assets are as follows: three hundred and twenty miles of constructed and equipped road; one hundred and seven miles of partially constructed and equipped road; three hundred and fifty miles of telegraph line, \$20,708,986.63; accounts collectible, \$73,481.77; supplies on hand, \$138,990.78; cash on hand, \$97,183; total, \$21,018,642.18. The road will extend from Shreveport, La., on Red River, to San Diego, Cal., with a branch from Marshall, Texas, to Texarkana, there connecting with the Cairo and Fulton Railroad, and from Texarkana, through Paris and Sherman, connecting with the main line at Fort Worth. Over this route the surveys have determined that in an engineering and commercial point of view the line to be adopted is as follows: Leaving Shreveport, the road runs almost due west through Caddo Parish, Louisiana, and through the counties of Harrison, Gregg, Upshur, Wood, Smith, Van Zandt, Kaufman, Dallas, and Tarrant, in

Texas, passing through the towns of Marshall, Hallville, Longview, Willow Springs, Gladewater, Hawkins, Mineola, Grand Sabine, Will's Point, Elmo, Terrel, Forney, Mesquitte, and Dallas, to Fort Worth, at the junction of the West and Clear Forks of Trinity River, in Tarrant County. The distance (by the company's line of route, as shown by their report) from Fort Worth to San Diego is 1,457.64 miles; from Shreveport to San Diego, 1,676.64 miles, and from Texarkana to San Diego, 1,693.63 miles. In addition to the main line from Shreveport to San Diego, the company have the Jefferson division, from Marshall to the Transcontinental Division, at a point five miles west of Texarkana, sixty-nine miles, (distance from Marshall to Texarkana, seventy-four miles,) and the Transcontinental division, from Texarkana to Fort Worth, two hundred and thirty-six miles.

The amount of stock of the Denver Pacific Railway and Telegraph Company, subscribed as authorized by law and paid in, is \$4,000,000. The receipts for the year ending June 30, 1874, for transportation of passengers, were \$165,910.71; of freight, \$112,462.74; miscellaneous earnings, \$8,152.34; total, \$286,525.79. The expenditures for the same time were \$130,975.68, leaving net earnings \$155,550.11. The cost of construction and equipment of the road to the date above stated was \$6,493,800, and the indebtedness of the company to that date was \$2,706,223.63.

GEOLOGICAL SURVEY.

In addition to the geological and geographical survey of the Territories of the United States, conducted during several years past by F. V. Hayden, under the direction of this Department, the surveys formerly conducted by J. W. Powell, under the auspices of the Smithsonian Institution, were placed by Congress, at its last session, under the direction of the Department of the Interior. The gentlemen named had been operating in contiguous Territories, the former in Colorado and the latter in Utah, and it was deemed advisable that a uniform system, in the prosecution of future surveys of this character, should be adopted. The survey to be conducted by Mr. Hayden was designated as the "First Division," and that by Mr. Powell as the "Second Division" of the "United States Geological and Geographical Survey of Territories," and full instructions were prepared by the Department for their guidance during the past season. They were instructed that the one great object of their labors was the construction of suitable maps of the country surveyed for the use of the Government and of the nation, which would afford full information concerning the agricultural and mineral resources and other characteristics of the unexplored regions of our territorial domain; and that, to this end, a uniform plan for mapping the areas of their surveys should be followed. A plan was therefore prepared and adopted by the Department, contemplating the construction of a physical atlas of the Territories of the United States,

REPORT OF THE STANDING COMMITTEE

valuable specimens of ores, minerals, fossils, Indian art, &c., were collected. Numerous ruins of towns and dwellings of an extinct race of people which once inhabited the mèses and cañons of western Colorado were found, and remarkable fortifications of hewn stone laid in mortar discovered in the sides of deep cañons, many of which are situated a thousand feet vertically from the stream below. The structure of these fortifications and dwellings and the peculiar glazed pottery in the vicinity indicate the existence of a people inhabiting this region many centuries ago, who were much further advanced in the arts than any of the Indian tribes of the present day. The results of the work of the past season will exceed in quantity and interest those of any previous year.

The field of operations during the past season of the second division, under Mr. Powell, was the central and northeastern portions of Utah Territory, and its labors were principally confined to the completion of the unfinished work of the preceding year. The main party is still in the field, so that the full results of the season's survey cannot at this date be given. It may be stated, however, that material has been collected for the mapping of an extensive region of country heretofore but little known; that the positions of many of the more important mineral lodes have been determined, and will be represented on the "general" maps; and that the area and distribution of such portions of the country surveyed, as can be redeemed by irrigation, will be properly indicated on the "special" maps. Extensive coal-beds have been discovered and traced, interesting and valuable specimens of fossils, rocks, minerals, and ores obtained, and a large collection made of Indian relics and articles, illustrating the arts existing among the Indians inhabiting that region. Mr. Powell had, in former surveys, discovered many ruins of towns and hamlets once occupied by the ancient inhabitants of the valley of the Colorado River; and during the past season many other such ruins have been found, some of their ancient picture-writings and many of their stone implements collected. The positions of many scores of these ruined towns will be accurately indicated on the "general" maps. The researches of this division among the extinct races, as well as the present inhabitants of this interesting region, have embraced polity, mythology, traditions, language, poetry, arts, habits, customs, and the means of obtaining subsistence, together with pre-historic remains; and when the results obtained shall have been published, it is believed that they will constitute an important contribution to the ethnography of American tribes.

These surveys have, so far as they have been prosecuted, resulted in affording much information of great value to our people, as well as to the scientific world. The construction of a physical atlas of the Territories, which will show all the results of the surveys as rapidly as they can be prepared for publication, is designed to preserve, for convenient reference, the information thus obtained; and if a continuation of the

surveys should be authorized, such an atlas would become, in time, of intrinsic value, not only to the people at large, but to other nations.

In view of these and other considerations, I regard the moderate cost of these surveys as more than compensated by the value of the information thereby obtained, and therefore cordially recommend a continuation of the United States geological survey of the Territories.

YELLOWSTONE NATIONAL PARK.

The remarks contained in my last annual report, in regard to the condition of the Yellowstone National Park and the necessity for an appropriation to enable this Department to provide for its proper government, apply with equal force at the present time, inasmuch as no appropriation for the purpose has been made. During the year several additional applications for permission to erect buildings, build roads, &c., have been received, but no action upon any of them has been taken, for the reasons given in said report, to which attention is respectfully invited. The superintendent has submitted an estimate for an appropriation of \$100,000 for the purpose of enabling the Secretary of the Interior to carry out the provisions of the act of March 1, 1872, which set apart and dedicated said park for the pleasure and benefit of the nation. This estimate was received too late to be included in the annual estimates of this Department, but will be submitted to Congress at its approaching session. I trust that prompt action will be taken, in order that the wonders of the park may be preserved.

CAPITOL.

The architect, in his report, furnishes the details of various improvements made in the Capitol and the grounds surrounding the same during the last fiscal year. The buildings which, at the date of the last annual report, remained on the squares recently purchased for the extension of said grounds have been removed, and the architect recommends that the space now occupied by temporary buildings, used as stables and work-shops connected with the Capitol, be also removed. The Government having purchased land north and south of the Capitol, partly for sites for the stables, &c., which are required for the accommodation of the mail-wagons and horses employed by both Houses of Congress, the architect urges the appropriation of a sufficient sum for the purpose of erecting such stables. The lot purchased for engine-house and stables has been graded, and the former building is now in process of erection. The frame structure opposite the main eastern portico of the Capitol, for many years occupied by the architect, has been removed.

IMPROVEMENT OF CAPITOL GROUNDS.

Congress having provided for the improvement of the Capitol grounds "according to the plans and under the general direction of Fred. Law

Olmsted," important changes have been made in that direction, in accordance with a general plan prepared by Mr. Olmsted. That portion of the grounds lying east of the Capitol has been excavated, in order to conform to the grades of the adjacent streets, the inferior trees having been removed, and the more valuable lowered and adjusted in the places designated for them.

The general plan of Mr. Olmsted provides for a court upon which all the doors of the eastern front of the Capitol will open, and for carriage and foot approaches to this court from each of the avenues and streets that open on the boundary of the grounds. The public thoroughfares heretofore dividing them are to be abolished. The treatment of those portions of the surface which will not be occupied by roadways and other necessary conveniences is designed to be very simple, with a view to its perfect subordination in interest to the architectural design of the Capitol. Artificial decoration will be applied to objects which serve a distinctly useful purpose, and then only where, by their form and position, they may be made to appear as attachments and supports of the central structure. Ornamental objects of this class, though substantial and elegant, will, with a single exception, be inconspicuous in a general view. The exception proposed is designed to produce an effect of greater strength and more stately proportions in the western base of the Capitol. The present building is set further out upon the hill-side than it would have been had the design from the beginning contemplated so large a structure, and the scant embankments faced with turf, by which its deep basement and foundations are concealed, have the effect of enhancing, rather than overcoming, this defect of position. It is proposed to substitute a single terrace 50 feet wide, with supporting walls 10 feet in height, of the same material and architectural character as the main structure, which, in a general view, will apparently give greater proportionate height and breadth of base to the building than at present, and will also impart to it the appearance of being seated more firmly on the summit of the hill.

Operations have thus far been limited mainly to the reduction of the surface on the eastern side of the Capitol, which has involved the removal of 150,000 cubic yards of material; the construction of new sewers; the laying of gas and water pipes, and the establishment of a suitable soil on the new surface. The new roadways and walks on the eastern side have also been graded, and the foundations of the road-beds laid.

PNEUMATIC TUBE.

In the last annual report of this Department it was stated that the contractor for the construction of a pneumatic tube to connect the Capitol with the Government Printing-Office, was at that time engaged in a second attempt to lay such a tube as would accomplish the purposes contemplated by the act making the appropriation therefor. His first

attempt had been unsuccessful, and it appears that he has not yet succeeded in connecting the buildings before named in the manner stipulated in his contract. The architect of the Capitol reports that a tube which works satisfactorily in the manner desired, has been laid from the Capitol to the Baltimore and Ohio Railroad track ; that it would be impracticable to carry the tube over or under said track in the present state of the grades in that locality ; but that when North Capitol street shall have been filled up to the proper grade, the tube can be successfully laid the whole distance required to connect said buildings. The architect states that the contractor is ready to finish the work as soon as the necessary grading of North Capitol street has been completed. I do not feel at liberty, however, to express any opinion in regard to the practicability of this undertaking.

BENEVOLENT INSTITUTIONS.

INSANE ASYLUM.

The number of patients in the Government Hospital for the Insane during the year ending June 30, 1874, was 849, being 87 more than were treated the preceding year; 477 were from the Army and Navy; 73 were pay-patients; 50 died, 80 were discharged as recovered, 28 as improved, and 9 as unimproved, leaving under treatment at that date 682 patients, a number exceeding by 62 that remaining at the same date of the preceding year. Of the whole number treated during the year, 659, or nearly three-fourths, and of those remaining under treatment at the close, 526, or nearly four-fifths, were males. During said year 229 persons were admitted to the hospital, of whom 111 were from the Army and Navy. Since the opening of the hospital, 3,597 persons, of whom 1,780 were native-born, have received treatment therein. The general health of the hospital has been excellent.

Fifty acres of the Shepherd farm, from which the forest trees were removed during the late war, have been placed under cultivation during the year. The expenditures for the last fiscal year amounted to \$156,-258.63, of which sum special appropriations, amounting to \$46,712.22, were expended in erecting a stock and hay barn, and in making various improvements and repairs in the buildings and grounds of the hospital. The sum of \$17,636.99 was received for board of private patients, and \$2,255.74 from the sale of live-stock, &c. The products of the farm and garden during the year were estimated to be worth \$20,650.14, and the live-stock, farm and garden implements, &c., belonging to the institution are valued at \$18,302.25. The board of visitors submit the following estimates: For support of the hospital during the year ending June 30, 1875, \$150,171; completing the river-wall, &c., \$8,748; building coal-vault, \$2,500; general repairs and improvements, \$17,000; and for supplying the hospital with water from the Potomac aqueduct, \$10,000; a total of \$188,419. The last item, of \$10,000, is regarded by the board

of visitors as essential to the safety and welfare of the institution, in view of the frequent scarcity and inferior quality of the water of the Anacostia River, upon which the hospital is now mainly dependent.

DEAF AND DUMB ASYLUM.

The operations of the Columbia Institution for the Deaf and Dumb during the past fiscal year have been conducted to the entire satisfaction of the Department. One hundred and thirteen pupils received tuition therein, of whom 59, representing twenty-one States and the District of Columbia, were in the collegiate, and 54 in the primary department. The course of study in this institution is well adapted to afford to the deaf and dumb much greater advantages in acquiring a good education than are usually at their command. The receipts of the institution during the year were \$1,953.39 in excess of the disbursements.

In the year 1866 the sum of \$600,000 was estimated as the cost of completing suitable buildings and grounds for the institution. The purchase of Kendall Green, which has since been effected at a cost of \$80,697.46, and which was not contemplated in the original estimate, makes a total estimated cost of \$680,697.46. The entire amount heretofore appropriated for the erection of buildings and the purchase of land, including the cost of Kendall Green, is \$454,645.33, being \$226,052.13 less than the first estimate. Assuming that the sum of \$125,000 may become necessary to complete the college building and provide for certain requisite alterations, the entire cost will be about \$100,000 less than was originally contemplated. I regard this favorable showing as reflecting credit upon the management of the institution.

The estimates for the next fiscal year are, in my judgment, reasonable, and deserve the favorable consideration of Congress. Among them are two items to which I invite special attention, viz: For continuing the erection and fitting up of the buildings of the institution in accordance with plans heretofore submitted to Congress, \$75,000; and for the improvement and care of the grounds thereof, \$4,000.

COLUMBIA HOSPITAL FOR WOMEN.

The number of patients who received treatment in the Columbia Hospital for Women and Lying-in Asylum, during the last fiscal year, was 2,125, of whom 2,017 were received during the year. The out-door patients numbered 1848; 1,621 were restored to health; 196 relieved; 13 died; in 180 cases the results are unknown; and 115 remained under treatment.

The directors estimate that \$24,300 will be required for the support of the institution during the fiscal year ending June 30, 1876.

FREEDMEN'S HOSPITAL.

During the year ending June 30, 1874, 582 patients received treatment in the Freedmen's Hospital, and in the orphans' asylum and

quarters connected therewith. Of these, 206 were admitted during the year; 50 were relieved; 117 were cured; 69 died, and 301 remained under treatment at the close of the year.

In addition to the inmates of the hospital and orphan asylum, there are 64 aged freed-people who reside in this District and who are supplied by the hospital with rations, medicines, medical attendance, and clothing. Most of these were formerly slaves on the Arlington estate, and came into this District upon the breaking up of the Freedmen's Village Asylum. The surgeon-in-chief reports that the greater number of the patients now in the hospital are so helpless, either from bodily infirmity or from extreme old age, that they will require to be supported from some source, during the remainder of their lives.

PUBLIC DOCUMENTS.

There were received at this Department, for distribution, during the fiscal year ending June 30, 1874, the following documents, viz :

From the Congressional Printer :

House and Senate documents.....	50,580
Wallace's Reports of the Supreme Court, vol. 17	300
Wallace's Reports of the Supreme Court, vol. 18	300
Report on the Acrididæ of North America.....	2,000
Report on the Extinct Vertebrate Fauna	2,000
Report on the Flora of Colorado	2,000
Dr. F. V. Hayden's sixth annual report	2,900
Dr. F. V. Hayden's first, second, and third annual reports.....	3,000
Miscellaneous publications of the United States geological survey.....	1,000
United States Official Register, 1873.....	1,500

From the Department of State :

Pamphlet Laws, first session Forty-third Congress	250
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From Messrs. Little, Brown & Co. :

Pamphlet Laws	11,000
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Total number of volumes received	76,330
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These documents were distributed as soon as practicable after their reception, in accordance with legal provisions relating thereto.

The expense necessarily connected with the packing and distribution of so great a number of public documents will require a larger appropriation than the last, which has been found inadequate for the purpose.

The reports relating to the geological survey of the Territories, under the supervision of Dr. Hayden, are in large request. I regard the continuation of the publication of these reports in numbers sufficient to meet a reasonable demand as very desirable. They embody the results of careful investigation, and are the best, and often the only, sources of information concerning those portions of our country to which they refer.

I beg also to call your special attention to the statistical atlas of the United States, compiled by Prof. F. A. Walker, from the census reports



general arrangement and in the important requisites of light and ventilation to any prison-building in this country. Proposals were duly invited by advertisement for cut-stone cornice and flagging, and contracts were awarded, with the approval of the board of commissioners, to the lowest responsible bidder in each case.

The architect invites attention to his former recommendation, that the building be completed in such a manner that it may be used not only for the purposes of a jail, but for those of a penitentiary. He estimates that the expense would be comparatively small, involving little more than the cost of the material required to construct work-shops and a suitable wall to inclose the premises. The convicts could perform the necessary labor in making such improvements, in grading the grounds, and extending them to the main channel of the Anacostia River. The latter improvement would, in the opinion of the architect, reclaim a considerable tract of valuable land, and is furthermore desirable in order to make the locality salubrious. He also states that were the building to be used for penitentiary purposes, a large annual saving to the Government would be effected.

The architect again submits for consideration the fitness of providing a separate building for the detention and reformation of female prisoners. He suggests the propriety of removing the inmates of the poor-house to some other and more desirable locality, and of converting the present building into a house of correction for female prisoners, for which purpose it can be adapted, in his judgment, at a reasonable expense. The poor-house is in close proximity to the jail, and while it is desirable, for many reasons, that the occupants of the former should be transferred to a more suitable locality, it is necessary that the building for the detention and reformation of female prisoners should not be far removed from the jail building.

The supervising architect submits the necessary estimates for the completion of the jail and its surroundings, in accordance with plans already approved. His estimate for the completion of the building amounts to \$490,057.93, and for fencing and inclosures \$9,900, in all \$499,957.93. Congress having made an appropriation of \$300,000 on the 1st of June, 1872, and an additional appropriation of \$50,000 on June 23, 1874, a balance is left to be provided for of \$149,957.93. He also estimates that there will be required for heating-apparatus \$29,900, and for kitchen-utensils, washing-apparatus, and driving-engine, \$5,691. The whole amount, therefore, that will be required to complete the jail, according to the supervising architect's estimates, is \$185,548.93.

TERRITORIAL PENITENTIARIES.

The penitentiary for the Territory of Washington, which was building at the date of my last annual report, was completed on the 21st of November, 1873. On the same day the building was inspected by a com-

Olmsted," important changes have been made in that direction, in accordance with a general plan prepared by Mr. Olmsted. That portion of the grounds lying east of the Capitol has been excavated, in order to conform to the grades of the adjacent streets, the inferior trees having been removed, and the more valuable lowered and adjusted in the places designated for them.

The general plan of Mr. Olmsted provides for a court upon which all the doors of the eastern front of the Capitol will open, and for carriage and foot approaches to this court from each of the avenues and streets that open on the boundary of the grounds. The public thoroughfares heretofore dividing them are to be abolished. The treatment of those portions of the surface which will not be occupied by roadways and other necessary conveniences is designed to be very simple, with a view to its perfect subordination in interest to the architectural design of the Capitol. Artificial decoration will be applied to objects which serve a distinctly useful purpose, and then only where, by their form and position, they may be made to appear as attachments and supports of the central structure. Ornamental objects of this class, though substantial and elegant, will, with a single exception, be inconspicuous in a general view. The exception proposed is designed to produce an effect of greater strength and more stately proportions in the western base of the Capitol. The present building is set further out upon the hill-side than it would have been had the design from the beginning contemplated so large a structure, and the scant embankments faced with turf, by which its deep basement and foundations are concealed, have the effect of enhancing, rather than overcoming, this defect of position. It is proposed to substitute a single terrace 50 feet wide, with supporting walls 10 feet in height, of the same material and architectural character as the main structure, which, in a general view, will apparently give greater proportionate height and breadth of base to the building than at present, and will also impart to it the appearance of being seated more firmly on the summit of the hill.

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ANNUAL REPORT

OF THE

SECRETARY OF THE INTERIOR

ON THE

OPERATIONS OF THE DEPARTMENT

FOR THE

YEAR ENDED JUNE 30, 1875.

During
the
cash re-
ceived dur-
ing the year
previous
etc.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1875.



R E P O R T
OF
THE SECRETARY OF THE INTERIOR.

DEPARTMENT OF THE INTERIOR,
October 31, 1875.

SIR: I have the honor to submit, for your consideration, the annual report of this Department, accompanied by the reports of the several Bureaus and institutions which, by law, are placed under its supervision.

PUBLIC LANDS.

During the year ending June 30, 1875, public lands were disposed of as follows:

	Acres.
Cash sales	745,061.30
Military-warrant locations	137,000.00
Homestead entries	2,357,057.69
Timber-culture entries	464,870.17
Agricultural-college-scrip locations	9,432.02
Approved to States as swamp	47,721.25
Certified to railroads	3,107,643.14
Certified for agricultural colleges	22,321.24
Certified for common schools	142,388.11
Certified for universities	16,454.04
Approved to States for internal improvements	8,614.25
Sioux half-breed-scrip locations	1,526.45
Chippewa half-breed-scrip locations	11,181.64
Total	7,071,271.30

A quantity less by 2,459,601.63 acres than that disposed of the preceding year.

The cash receipts were \$1,779,616.27; a sum less by \$690,322.23 than that received the previous year.

During the year 26,077,531.86 acres were surveyed, making, with the quantity previously surveyed, 680,253,094.21 acres, leaving yet to be surveyed 1,154,471,762.79 acres.

The quantity of land disposed of under the homestead and timber-culture laws was less by about a million and a half acres than that so disposed of the year immediately preceding. This result is attributed, and no doubt correctly, by the Commissioner of the General Land-Office, to the grasshopper plague, the drought, and the consequent dimi-

nution of emigration to the land States and Territories. Aside from these considerations, however, which are temporary in their character, he expresses the opinion that a steady diminution of such entries may hereafter be expected, growing out of the fact that the best lands subject to such entries have, in great measure, been already disposed of.

The report of the Commissioner is replete with valuable information and timely suggestions as to the expediency of changes in some of the laws relating to public lands. I would especially commend to the favorable consideration of Congress his remarks as to the necessity of a change in the Manual of Surveying Instructions, which has the sanction of law, as to the rates allowed by law for surveying mountainous districts; the disposal of timber and grazing lands; the consolidation of the pre-emption and homestead laws; the repeal of the law requiring public lands in Alabama, Mississippi, Louisiana, Arkansas, and Florida to be disposed of under the homestead acts only; the errors in the Revised Statutes, which are now the law of the land, and the re-organization of the clerical force of his Office.

SAN JUAN AND OTHER ISLANDS.

The commissioner appointed by you, under the act of 20th June, 1874, to make and report to this Department a list of all British subjects who, on the 15th of June, 1846, were in the occupation of land, lawfully acquired, within the limits of the award of His Majesty the Emperor of Germany, together with a description of the land actually occupied by each person at said date, satisfactorily performed his duties. He reported that, after due notice given by publication for a period of more than thirty days, in a newspaper having extensive circulation on the islands in question, and by posting conspicuously the notice in all the post-offices in the archipelago, he proceeded in person to Victoria, British Columbia, where he was informed by the chief factor of the Hudson Bay Company that said company would present no claim under said act. He then proceeded to San Juan and Lopez, but no British subject presented any claim under the act. You accordingly, on the 3d of August last, issued a proclamation terminating the withdrawal made by your previous proclamation of 4th February, 1873, which was issued in order to protect the rights of British subjects under the treaty of 15th June, 1846. Said termination took effect on the 30th ultimo, and the lands are now open to disposal as other public lands, except such as have been reserved by your orders for military and light-house purposes.

PATENTS.

During the year ending the 30th ultimo, 21,489 applications for patents were filed, and 14,230 patents, including re-issues and designs, issued; 42 applications for extensions were made, and 81 patents extended; 3,052 caveats were filed; 2,495 patents were granted, but not

issued by reason of non-payment of the final fees; 951 applications for the registration of trade-marks were received, and 993 trade-marks were registered. The number of patents issued during said year exceeded those of the preceding year by 685. The total amount received during the year from fees, &c., was \$732,285.87, and the total expenditures were \$708,874.35, leaving an unexpended balance of \$23,411.52.

INDIAN AFFAIRS.

The report of the Commissioner of Indian Affairs presents the details of the transactions of the Indian Bureau for the past year, and furnishes interesting information in regard to the present condition of the various Indian tribes. The Commissioner makes several important and valuable recommendations in regard to the future management of the Indians, to which your attention is respectfully invited.

The general situation of the Indian service may be regarded as encouraging, and progress has been made during the year in perfecting and extending the Indian policy. Wherever all the elements of success have been available, the result has clearly vindicated the propriety and efficiency of that policy in the increased interest taken by both agents and Indians in the acquisition of industrial pursuits, and in the increase of peaceful disposition toward the whites. Schools are increasing in number and interest; farming, wherever the soil is suitable, is being prosecuted more vigorously and intelligently, and the desire of the Indians to prepare for themselves more comfortable and fixed abodes is becoming more general. At the important agencies of Red Cloud and Spotted Tail, in the Dakota, or Sioux Nation, however, one of the principal elements of success—a productive soil—is wanting, and no progress has been made, and none can be expected, while the present conditions by which they are surrounded shall remain. The problem of how to deal with these Indians seems as far from solution as ever, and, in fact, it has been still further complicated the present year by the discovery of gold in the Black Hills and the emigration of large numbers of miners thither. The suggestions of the Commissioner in regard to this numerous people are practical, and worthy of consideration.

There can be no doubt whatever that so long as the great bulk of the Sioux are encouraged to occupy their present locations near the Red Cloud and Whetstone, or Spotted Tail, agencies, and to roam at will over their vast reservation and west and northwest to the Big Horn Mountains and to Powder River and the Yellowstone, they can make no progress whatever, and must be fed year after year by the Government. The recommendation by the Commissioner that the two agencies above mentioned be removed to the Missouri River meets with my unqualified approval. The soil over which they now roam is totally unfit for cultivation, the location of those agencies is so remote from the railroad and river that the cost of supplying them is greatly enhanced, and their isolated position gives them almost entire immunity from Government

control whenever they are disposed to commit any outrages upon the person or property of neighboring settlers or more friendly tribes.

The removal of these agencies to the Missouri River, at some point or points between the mouth of the Cheyenne River, and Fort Randall, to be hereafter determined upon, will result in greater economy and convenience of supply, and greater facility to restrain and coerce refractory Indians whenever the necessity arises. It will also locate them where there are arable lands, good water, and abundance of timber and grass. I therefore suggest that the appropriations in future shall be made conditional upon this removal, and that none of the supplies or annuities hereafter granted by Congress shall be issued to these Indians, excepting at some point or points on the Missouri River, where those agencies shall be permanently located. If this suggestion shall receive the favorable action of Congress, a proper location will be selected, and those agencies removed prior to the beginning of the next fiscal year.

The relative location of the Indians now supplied at Fort Belknap, Montana, to the Missouri River, is so nearly analogous to the location of the Sioux, above referred to, that I have already ordered their removal to the river, and the abandonment of the present agency at Fort Belknap, for the reasons given above in regard to the removal of the Sioux at Red Cloud and Spotted Tail agencies.

Attention is invited to the condition upon which the Sioux relinquished their right to hunt in Nebraska, namely, that in addition to the \$25,000 heretofore appropriated for that purpose, the Department agreed to recommend the further appropriation of a like amount. While presenting this recommendation, however, I deem it my duty to state that under the terms of the treaty of 1868 that right probably no longer existed at the time said promise was made, it having expired by the terms of the treaty itself. That treaty reserved to the Sioux "the right to hunt on any lands north of the North Platte, and on the Republican Fork of the Smoky Hill River, so long as the buffalo may range thereon in such numbers as to justify the chase." It is the concurrent testimony of Army officers and white settlers familiar with the section of country referred to as a hunting-ground, that the buffalo no longer range thereon "in such numbers as to justify the chase."

The failure of the negotiations for the relinquishment of the Black Hills necessitates the adoption of some measures to relieve the Department of the great embarrassment resulting from the evident determination of a large number of citizens to enter upon that portion of the Sioux reservation to obtain the precious metals which the official report of the geologist sent out by the Department shows to exist therein. The very measures now taken by the Government to prevent the influx of miners into the Black Hills, by means of the display of military force in that neighborhood, operate as the surest safeguard of the miners against the attacks of Indians. The Army expels the miners, and,

while doing so, protects them from Indians. The miners return as soon as the military surveillance is withdrawn, and the same steps are taken again and again. Some of the miners have brought suits against the military officers for false imprisonment, and much embarrassment to both the Army and the Interior Department is the result.

The preliminary report of Professor Jenney, which accompanies the report of the Indian Commissioner, in regard to the geological and agricultural wealth of the Black Hills, indicates clearly the great temptation held out to emigrants and miners to occupy that country, and will greatly enhance the difficulties which have already surrounded the question of protecting the Sioux in their treaty-rights to that territory. The opening of the next summer season will undoubtedly witness a great increase of emigration thither, and the question urges itself upon the attention of the Department and of Congress for early solution.

It is true that the Indians occupy that reservation under the provisions of a treaty with the United States. It is also true, as a general proposition, that treaties should be maintained inviolate, and the Indians protected in their rights thereunder. But for two years the Government has been appropriating about one and one-quarter millions of dollars for the subsistence of the Sioux of various tribes, which amount is a gratuity that the Government is under no legal obligation to give them, and for which it receives no compensating advantage. The amount thus appropriated is 5 per cent. per annum of \$25,000,000, which the Government is giving without an equivalent. This amount must be annually given them for some years to come, or they will starve. It is submitted, therefore, under these circumstances, for the consideration of Congress, whether it would not be justifiable and proper to make future appropriations for supplies to this people contingent on their relinquishment of the gold-fields in the Black Hills, and the right of way thereto.

The suggestions of the Commissioner in regard to Indian civilization, the modification of the homestead laws for the benefit of the Indians, and turning over the Indians in the States of New York, Michigan, Wisconsin, and a portion of those in Minnesota to the control of the States in which they live, are deserving of the careful attention of Congress, as being steps in advance upon the question of Indian management. His remarks upon the necessity of law for the punishment and protection of the Indians are also of importance, as tending in the same direction.

The condition of the Indian Territory south of Kansas has not changed during the year, and will not materially change for the better until some steps are taken to give its inhabitants a more efficient government. The necessity for the establishment of courts of justice therein for the trial of all offenses against persons or property becomes more pressing year by year, and the whole question of legislating for that territory is respectfully but urgently pressed upon the attention of Congress. I

have taken the necessary steps to procure a full and unbiased report of the condition of things in that territory, and will ask the privilege of submitting to you a special report on the subject at an early day after the meeting of Congress, at which time some further recommendation in that behalf may be found to be necessary and proper.

The peculiar condition in which the so-called Mission Indians of Southern California are situated is clearly stated in the Commissioner's report, and he makes suggestions in regard to their treatment. The unsettled condition of this people is a source of embarrassment to the white settlements in that portion of California, and will continue to be an element of irritation and danger until some measures are adopted for their relief.

It would be beneficial to the Indian service, in my opinion, and would tend to promote its efficiency, if the laws preventing the detail of Army officers for civil service were so far modified as to allow their employment in the Indian service at the discretion of the President, in case of emergency. Such a change would place at the disposition of the Executive a corps of disciplined, intelligent officers, whose familiarity with the entire Indian country and the needs of the service would render them invaluable in an emergency such as has arisen during the present year, and such as is liable to arise at any time in the treatment of large bodies of wild Indians.

The Secretary of the Interior now holds in his possession, in trust for various Indian tribes, bonds of the United States and of several of the States, the par value of which is about \$5,000,000. Authority has been conferred upon the Secretary of the Interior, from time to time, by Indian treaties and acts of Congress, to invest the proceeds of the sales of lands ceded to the United States by Indian tribes. The authority so given to invest, as trustee, seems to have been construed as implying also the authority to hold such securities in possession by the Secretary of the Interior in trust, and he now holds such stocks and bonds to the amount of \$5,107,516. Whether the right to hold those securities is conferred by the laws and treaties referred to or not, I recommend that the necessary legislation be made authorizing their transfer to the Treasurer of the United States, by whom the interest thereon, as it accrues, shall be placed to the credit of the proper tribe, to be drawn on requisition of the Secretary of the Interior, as in the case of appropriations. Such a disposition of these securities will relieve the Secretary of the Interior of a disagreeable responsibility and duty not in any way homogeneous to the general duties of the office, and place the bonds where all such valuables should be kept.

The co-operation of the religious bodies having in charge the duty of nominating Indian agents has been harmonious and satisfactory, and they have evidently been careful in their selection of proper men for those positions.

The Board of Indian Commissioners has been efficient in the perform-

ance of its duties, and has rendered valuable assistance to the Department in the supervision of the purchase and inspection of annuities and supplies, in the examination of contracts, and the auditing of vouchers. It is to be regretted that their annual report is not made in time for me to profit by their suggestions and observations in making this report; and it is hoped that hereafter it will be completed on or before the 1st of November in each year.

The Commissioner alludes to the fact that, with the exception of the hostilities with the Cheyennes and Comanches, which were pending when the reports for the last year were closed, and which ceased soon afterward, there have been no serious collisions between the Indians and the whites in our entire domain. This fact is one of great encouragement, showing, conclusively, that the Indians are anxious to maintain peaceful relations; and that even under great provocations, which they have had in several instances during the year, they have come to recognize so thoroughly the power of the whites and the good faith of the Government toward them, as to trust to that Government and not to their own strength to redress their wrongs.

There are still some roving bands of hostile Sioux in the Big Horn and Powder River country of Dakota and Montana which should be subjugated and compelled to cease their raids and depredations upon other tribes and upon the whites. When this is done there will be but little trouble, with a fair degree of tact, intelligence, and force, to control our entire Indian population.

On the whole, I cannot but regard the work of the year in the Indian service as showing decided progress in the direction of establishing peaceful relations, encouraging to habits of industry, leading toward civilization and education, and generally tending toward the accomplishment of what you sought by your policy to secure, namely, the protection, support, and improvement of the aborigines of the country, without impeding the westward progress of white settlements. The experiences of the year have developed necessities for still further legislation, which are mentioned in the Commissioner's report, and to which careful attention is invited.

The thanks of this Department are due to the War Department and the officers of the Army for the prompt and efficient aid they have rendered during the year in the management of Indian affairs throughout the country, and for their hearty co-operation and advice whenever called upon to render assistance in carrying out the details of the Indian policy.

The commission which was appointed during the year to investigate the management of affairs at the Red Cloud and Spotted Tail agencies made some valuable suggestions in their report, in which I cannot refrain from concurring. In regard to the necessity of laws for the protection and punishment of Indians, they say:

The criminal-laws of the United States should be extended over the reservations, and

when an Indian outside of a reservation shall commit an offense he should be made subject to the police and criminal laws of the State in which such offense is committed. Some form of territorial policy should be established for their government when the number and compactness of their population would render such an organization proper. The individuality of the Indian as a member of the community should be recognized and the absurd fiction of tribal sovereignty in which that individuality is now merged, should be abolished. Courts should be organized for the administration of justice over such territory. The individual ownership of property should be encouraged under temporary restrictions on alienation, and the privileges of citizenship made accessible upon such terms as good policy may prescribe. The evils that result from the absence of provisions like this are apparent. Community of property is fatal to industry, enterprise, and civilization, and exemption from legal responsibility for crime has stimulated depredations, robbery, murders, and assassination.

In regard to the inspection and delivery of supplies, they remark:

We have already recommended that officers be detailed for the inspection of beef and beef-cattle at the Indian agencies; and, for reasons similar to those already mentioned in that connection, we recommend that all inspections of Indian goods (except annuity-goods, the inspection of which is provided for by treaty) and supplies at the points of purchase and shipment, at terminal points of railroad transportation, and at the agencies, before the articles pass into the possession of the agents, be under the exclusive charge of the Commissary-General of the Army. We believe that such a system would not merely serve as a salutary check on contractors, freighters, and agents, but would be of great use in satisfying the public mind that the service was fully and faithfully performed. It would seem desirable that a copy of the reports of all such inspections should be transmitted, through the proper channels, to the Indian Office.

They also recommend—

That in accordance with the provisions of the treaty of 1868, Army officers be detailed to inspect all issues of annuity goods, and that all inspections of Indian supplies and beef be made under the direction of the Commissary-General of the Army.

That a carefully-devised system of accounts, uniform for all agencies, be established, with the mode of issuing and accounting for all articles definitely prescribed.

That the agencies, differing greatly as they do in the amount of intelligence and capacity required to conduct them, be so graded as to establish for the most important ones salaries sufficient to secure the services of thoroughly-trained and competent men.

That all future legislation for the Indians, and all dealings with them, be based upon the policy of bringing them as rapidly as possible under the same law which governs all other inhabitants of the United States.

The minor recommendations of the commission, such as require no legislation, and need only departmental action, will be carried into execution as rapidly as possible, so far as they meet my approval.

PENSIONS.

The annual report of the Commissioner of Pensions shows that the number of pensioners on the roll continues to decrease, as was anticipated in the last annual report of this Department. The greatest number was reached during the year ending June 30, 1873, since which time the roll has undergone a steady decrease. There has not, however, been a corresponding reduction in the annual charge to the Government on this account, for, while the roll has decreased 1,420 in number during the last fiscal year, the total annual rate is \$44,733.13 in excess of that of the preceding year. This result is owing, principally, to the

steady growth of the roll of invalid pensioners and the increase in the average annual rate of such pensions, which has advanced, under the operation of the more recent liberal enactments of Congress, from \$90.26 in 1872 to \$103.91 in 1875, to each pensioner.

On the 30th of June, 1874, the names of 236,241 pensioners were borne on the rolls, at an annual aggregate rate of \$26,244,786.46. During the year next ensuing, 11,557 names were added to the roll, and 12,977 dropped therefrom for various causes, leaving the names of 234,821 persons on the roll June 30, 1875, whose pensions annually aggregate the sum of \$26,289,519.59. Of the latter number, 210,363 were Army pensioners, 105,478 of whom were invalids and 104,885 widows and dependent relatives; 3,420 were Navy pensioners, of whom 1,636 were invalids, and 1,784 widows, &c.; and 21,038 were pensioners of the war of 1812, 15,875 of whom were survivors, and 5,163 widows; a total of 234,821 pensioners.

There were examined and allowed, during the last fiscal year, 26,918 Army-pension claims, of which 5,876 were for invalid pension, 13,483 for increased pension to invalids, 4,732 for pension to widows, dependent relatives, &c., and 1,927 for increased pension to widows, &c.; 443 Navy-pension claims, of which 170 were for invalid pension, 127 for increased pension to invalids, 122 for pension to widows, dependent relatives, &c., and 24 for increased pension to widows, &c.; and 657 claims for pension of survivors and widows of soldiers in the war of 1812, of which 241 were for pension to survivors, and 416 to widows; making a total of 27,118 claims adjudicated during said year, at an aggregate annual rate of \$2,119,169.07.

During said year the payments from the appropriations for pensions were as follows: To Army invalids, \$11,748,433.79; to Army widows and dependent relatives, \$15,525,734.30; to Navy invalids, \$185,675.82; to Navy widows, &c., \$334,672.65; to survivors of the war of 1812, \$1,355,599.86, and to widows of soldiers in that war, \$533,000.21; in all, \$29,683,116.63, which amount includes the expenses of disbursement.

It thus appears that, notwithstanding the total amount due on the pension-roll has been increased during the year by \$44,733.13, the total disbursements were \$910,632.93 less than during the preceding year; but this apparent decrease in the annual expenditure results from the reduction in the amount of arrearages due on pensions allowed during the year, and on pensions, previously granted, the average rate of which has been increased by recent legislation.

On the 30th of June last there were on file 66,107 unadjudicated pension-claims, of which 32,228 were for invalid pensions, 33,138 those of widows, dependent relatives, &c., and 741 of survivors and widows of soldiers of the war of 1812; and 7,778 pending claims for increased pension, 6,772 of which were those of invalids, and 1,006 of widows and dependent relatives; in all, 73,885 claims undisposed of at that date.

There were borne on the rolls, at the close of the year, the names of

379 widows of soldiers in the revolutionary war, and of 1,009 widows and children of soldiers who served in wars subsequent to the Revolution, excepting that of 1812, and prior to the late rebellion.

During said year 675 applications for bounty-land were filed, and 407 warrants issued for 63,560 acres of land, being 27,920 in excess of the number of acres issued for the preceding year. I respectfully renew the recommendation contained in the last annual report of this Department, in regard to the propriety of suitable legislation by Congress for limiting the period during which the several laws relating to bounty-land shall remain in force. Attention is invited to the recommendation of the Commissioner for the repeal of section 2444 of the Revised Statutes. Under that section bounty-land warrants are made personal chattels, and assignable by legal representatives. Before the enactment of that provision of law, it was the custom of the Department, in accordance with the opinion of several Attorneys-General of the United States, to treat such warrants as realty, because they were inchoate title to real estate. The change thus wrought in their status has opened up a wide field for fraud, and improperly-appointed administrators have sold and assigned such warrants, without the knowledge or consent of the heirs, and without the latter knowing even of the issue of the warrants by the Pension-Office. In this manner frauds have been committed and widows deprived of their property, under cover of the section referred to. Its repeal will render such transactions impossible in the future. Section 2445 of said statutes should also be repealed, because administrators, as such, should have no control over real property; the widows and heirs of deceased claimants being, through their attorneys, fully competent to prosecute their claims, and to protect their own interests before the Pension-Office.

The Commissioner estimates that by the 4th of December next 12,500 applications for increased pension, based upon the biennial examinations made on the 4th of September last, will have been filed. A total estimated cost of \$25,000 for re-examinations by surgeons is involved in the adjudication of these claims, as, under existing laws, an increase of pension must, unless the disability be permanent and specific, commence from the date of the examining-surgeon's certificate made under the pending claim. The Commissioner is of opinion that re-examinations in these claims are unnecessary, for the reason that they could be properly adjudicated upon the reports of the recent biennial examinations, and that the sum of \$25,000 could be thus saved to the Government. I therefore recommend such an amendment to the law as will authorize the acceptance of such reports within six months after their date, in the adjudication of claims for increased pension, so that the increase, if allowed, will commence from the date of the biennial examination in each case.

The Commissioner also suggests the propriety of further legislation to more fully define what shall be accepted as evidence of the remarriage

of pensioned widows, mothers, and sisters. Special investigation by agents of the Office discloses the fact that many pensioners of this class are living in a state of cohabitation with men to whom, no doubt, they would be legally married were it not that by so doing they would forfeit, under existing laws, their right to pension. Under a liberal interpretation of the pension-laws, proof of such cohabitation, or of general recognition of the parties as husband and wife, is accepted, in the adjudication of claims of this description, as sufficient evidence of marriage, where no better can be furnished, and it seems only proper that such proof should be accepted as sufficient to establish the same relation in the case of a pensioner. A due regard for the interests of the Government and for the conservation of public morals appears to require such a modification of the law as will authorize a forfeiture of the pension of a widow, dependent mother, or sister, upon the discovery of proof of such cohabitation, and I therefore recommend suitable legislation to that end.

In the adjudication of claims of widows of colored soldiers, the provisions of section 4705 of the Revised Statutes are found to discriminate unjustly between white and colored claimants who resided at the time of their alleged marriage in those States wherein, prior to the late rebellion, marriages of colored people were recognized by law. The requirements of the general pension-law, in regard to evidence of marriage of white claimants of this class, are much more rigid than those of the section referred to, and, believing that white and colored claimants residing in the States referred to should be placed upon the same footing before the law, with regard to proof of marriage, the Commissioner recommends such an amendment to said section as will confine its provisions to those widows of colored soldiers who, at the time of their alleged marriage, resided in the late slave States.

The efforts of the medical division to secure just and equitable rates of pension have been unrelaxed. With each succeeding year it becomes more and more apparent that the amount of annual expenditures for pensions depends materially upon correct ratings of the disabilities of invalid pensioners. In the adjudication of claims for invalid pension, and for increase of the same, the medical questions involved are of the first importance, and, as their determination depends materially upon the reports of examining-surgeons, as revised by the medical division, it is obvious that men of the highest professional standing and of undoubted integrity should always be selected to fill such positions. Numerous changes have been made during the year in the roster of examining-surgeons, numbering 1,491 on the 30th of June last; but the Commissioner states that, notwithstanding his efforts to secure the best medical talent, it is impossible, under the present system, to secure such medical examinations and reports as are necessary to an intelligent adjudication of claims of invalids or those for increased pension. The following facts, hereinbefore referred to, have an important bearing in

this connection. During the last fiscal year the invalid-pension roll was augmented by 3,106 names, whereas all the other classes of pensions were reduced 4,526 in number. Notwithstanding the fact that the losses to the entire roll during said year exceeded the additions thereto by 1,420 names, the annual expenditure, as before stated, was increased by the sum of \$44,733.15, which is mainly due to the appreciation in the average annual amount paid to each invalid pensioner. The increase in such average during the three years immediately preceding June 30, 1875, amounted to \$13.65 per annum to each invalid pensioner, involving an accretion, during those three years, of nearly one and a half million dollars to the total annual rate of the roll, independently of any additions to its number. It is apparent, therefore, that if the roll of invalid pensioners continues to increase in equal proportion to the number added thereto during the last fiscal year, with a proportional advance in the average yearly pension, there will be no immediate reduction in the annual expenditure for pensions, for, as I have before stated, the gain to said roll during the last fiscal year exceeded the losses to the other rolls. I regard a partial departure from the existing system of making medical examinations of pensioners, or claimants for pension, as fully warranted by the facts and considerations herein presented, and as necessary to the interests of the public service. I therefore recommend such new legislation as will authorize the employment of a number of surgeons, not exceeding sixty, at a liberal annual salary, who shall be selected from the most eminent medical men in the United States, and assigned to certain defined districts, into which the country shall be divided, subject to such changes as the interests of the service may demand. In making such recommendation, it is not proposed that the present system of appointment and payment of examining-surgeons should be entirely superseded by the appointment of district-surgeons, but that, so far as possible all examinations should be made by the latter. The number of examining-surgeons could thus be largely reduced, their services being only required in those cases where, for want of time, the district-surgeon may be unable to make examinations without subjecting claimants for pension to long delay.

During the last fiscal year 1,530 cases were investigated by special agents of the Office. Of these 309, all of which were admitted claims were found to be fraudulent, and 243 pending claims were recommended for rejection. It is estimated that the sum of \$144,532.84 was saved to the Government during the year by the exertions of the special-service division. These investigations were made by clerks of the Office, detailed for the purpose under existing laws; but, the entire clerical force of the Pension Office being inadequate to a prompt disposition of its current business, it is obvious that no considerable detail therefrom can be made for special service. The number of claims requiring such investigation is accordingly greater than the limited force of the divisor

can dispose of, and thus action in many cases is suspended for months, involving much complaint, more or less just, on the part of claimants. The Commissioner, therefore, recommends the entire reorganization of the division, upon a basis similar to the special-service of the Post-Office and Treasury Departments, and that authority be given by law for the appointment of a regular corps of special agents, at least 30 in number, who shall receive a fixed annual salary, and, when traveling on such duty, shall be entitled to a *per-diem* allowance for subsistence and their actual traveling-expenses.

Almost the entire clerical force of the Pension Office is employed in the Seaton House building, and all the records and files relating to claims for pension and bounty-land are stored therein. The unsuitableness of this building for the purpose, and its insecurity as a place of deposit for valuable records and files, have been commented upon at length in the annual reports of my immediate predecessor. The building was rented four years ago for the use of the Pension Office, under a lease which expired on the 10th of August last, and its occupation is continued under a condition of the lease which allows the Government to occupy it from year to year, as may be required, at the same rent, viz, \$10,000 per annum. Unavailing efforts were made to find a more suitable building before the expiration of said lease, and it has been found necessary to rent two additional buildings adjoining the Seaton House at an annual cost of \$3,500. The whole amount, therefore, which is now paid for rent of buildings used by the Office is \$13,500.

The Commissioner invites attention to the necessity for an addition to the present force of his Office, and to the propriety of a reorganization of such force, whereby higher rates than are now paid would be provided for those clerks who are employed in the more responsible positions therein. At the close of the last fiscal year, the number of original pension-claims on file, unadjudicated, was 66,107; an increase of 4,447 pending claims during the year. The whole number of original claims filed during said year was 18,704, and of claims for increased pension 18,563, a total of 37,267 claims; while during that period 27,118 claims of all classes were allowed, and 9,078 rejected; making a total number of 36,196 claims disposed of, or 1,071 less than the whole number received during the year.

The foregoing figures show the necessity for additional clerical force in the Office, if it is desired by Congress that said force should be sufficient to not only dispose of the current business of the Office, but also the accumulations of past years, represented by the 66,107 pending claims above referred to, in addition to which there were 7,778 pending claims for increased pension. Many of these claims are doubtless meritorious, and it is only just to those who were disabled in the cause of our country during the late rebellion, and to their widows and depend-

ent relatives, that such provision should be made as will insure prompt action on their claims upon the bounty of the Government.

It is estimated that the sum of \$29,535,000 will be required for the pension-service during the next fiscal year; which amount is less by \$965,000 than the estimate submitted for the current fiscal year.

EDUCATION.

The report of the Commissioner of Education for the last fiscal year contains the usual abstracts of reports of State and city superintendents, and of other official publications relating to educational matters, together with increased tables of statistics compiled from replies to inquiries, made by the Commissioner, of the various State and city educational officers, and of institutions devoted to the interests of public instruction.

The benefits of a common nomenclature adopted in reporting statistics relating to education are becoming apparent. The information now given to the public by means of the official publications of State and local school-systems and of educational institutions is thus more easily generalized and better understood. Valuable lessons are derived, in the opinion of the Commissioner, from the generalization of such a multitude of facts obtained from so large a number of State, territorial, and city systems and from so many institutions, and he regards the enunciation of such lessons as of more general importance than the exercise of any control in educational matters; for in this way existing excellencies are shown and emulation excited, while past errors are noted and methods of improvement suggested.

The demand upon the Office for information upon special topics has been met, in part, by the publication of eight pamphlets, containing, in all, 704 octavo pages. During the year more attention has been given to the introduction of drawing in public schools than formerly, and there has been a marked tendency to abandon faulty and obsolete methods of instruction, adopting those more in harmony with natural development, and better adapted to fit pupils for the more practical duties of life. A special report on drawing, as taught in these schools, and on art-education in the United States, is in preparation and nearly ready for publication.

The statistical work of the Office has largely increased during the year. In addition to general inquiries with reference to State and territorial school-systems, requests have been made for special information of the various universities, colleges, schools of science, theology, law and medicine, schools for the higher instruction of women, college preparatory schools, academies, museums of art and natural history, schools for the deaf, dumb, and blind; reformatories, and asylums in the country. A special report is now in course of preparation in regard to public libraries in the United States, including those of schools, colleges, societies, &c., which will furnish interesting statis-

tics, and show their historical development, classification, management, and circulation.

The Commissioner alludes to the embarrassment encountered by the promoters of education in those States wherein slavery has been more recently abolished, and recommends the adoption of appropriate relief measures by the General Government. In view of the rapidly increasing work of the Office, and of the general importance of such work, the Commissioner asks that such an increase to the clerical force of his Bureau be made as will enable it to accomplish more satisfactorily the purposes for which it was established and is conducted. Its labors have also been materially increased by its connection with the approaching Centennial Exhibition, involving the necessary correspondence with educators for the purpose of harmonizing all diverse projects and plans for a proper showing of educational methods, appliances, and results, and the preparation of such limited, but correct and authoritative, reports on the various school systems, classes of institutions, and phases of education, as will be of permanent value.

CENSUS.

The work of the Census Office during the past fiscal year has consisted principally of correspondence relating to the publication of the census of 1870, the projected State censuses of 1875, the International Statistical Congress to be held in Hungary in 1876, conducted by the Superintendent at his home; and the labor attending the verification of statistical statements by means of the census-rolls, the consultation of manuscript-returns for specific or technical information not embodied in the quarto volumes, and the adjustment of unpaid accounts of marshals and assistant marshals at the census of 1860, performed by the custodian of the census-records of this Department.

During the year the statistical atlas of the United States, compiled under the act of March 3, 1873, has been completed and issued from the press, and all accounts relating thereto have been closed. The appropriation for the purpose was found sufficient to finish the work without any deficiency, notwithstanding that the plan of publication was greatly enlarged after the estimates of expenditure were framed. The Superintendent states that the atlas has received unexpected favor at home and abroad, and that at the International Geographical Congress held in Paris during the past summer a gold medal of the first class was awarded to it.

The Superintendent is of opinion that some disappointment will be felt by those interested in the progress of statistics in the United States at the comparatively small results to be derived from the anticipated State censuses of 1875. He reports that censuses, more or less complete and formal, have been taken during the present year under State laws and by State agencies only in the following-named States: Florida, Iowa, Kansas, Louisiana, Massachusetts, Minnesota, Nebraska, Nevada, New

Jersey, New York, Oregon, Rhode Island, and Wisconsin, and that a census of the population of Michigan was taken in 1874, full results of which have been published. The Superintendent states that enough is already known of the results of the censuses of 1875 to indicate, quite clearly, that the progress of our population has received a temporary check.

RAILWAYS.

The facts and figures herein set forth are compiled from the annual reports of the companies.

Stock of the Union Pacific Railroad Company to the amount of \$36,783,000 has been subscribed, of which \$36,762,300 has been paid. The receipts for the year ending 30th June, 1875, from the transportation of passengers, were \$4,408,966.15; of freight, \$6,064,637.59; and from miscellaneous sources, \$1,048,417.80; total, \$11,522,021.54. These figures include "the amounts earned from, but withheld by, the United States for transportation of its passengers, freight, and mails." The expense of operating the road for the year was \$5,373,655.87, leaving net earnings \$6,148,365.67. The entire cost of the road and fixtures to 30th June, 1875, was \$112,596,252. The construction account of the Omaha bridge shows its cost to have been \$2,866,463.72. The total bonded indebtedness of the company is shown to be \$79,457,912, of which \$27,236,512 is due to the United States.

The amount of stock of the Central Pacific Railroad Company subscribed is \$62,608,800, of which \$54,275,500 has been paid. The receipt for the year ending 30th June, 1875, from transportation of passengers were \$5,330,326.18; and of freight, \$8,602,534.96; total, \$13,932,861.14. The operating expenses of the road for the year were \$5,901,363.01, leaving net earnings to the amount of \$8,031,498.13. At the close of said year, the indebtedness of the company amounted to \$86,168,688.11, of which \$27,855,680 is due to the United States. This company embraces by consolidation, (besides the original Central Pacific Company,) the Western Pacific, the California and Oregon, the San Francisco, Oakland and Alameda, and the San Joaquin Valley Companies.

Stock of the Central Branch Union Pacific Railroad Company to the amount of \$1,000,000 was subscribed, of which \$980,600 has been paid. The receipts for transportation of passengers for the year ending the 30th of June, 1875, were \$36,495.80; and for freight, \$77,024.08; total \$113,519.88. The actual amount expended for said year—"running expenses and repairs"—was \$123,188.43. The cost of the road and fixtures has been \$3,763,700. The total amount of the indebtedness, in addition to the Government loans and first mortgage of \$1,600,000 and interest unpaid, is \$303,902.63, which indebtedness is made up of the following kinds: money borrowed to take up coupons and pay internal revenue claims and debts and liabilities of the company.

The amount of stock of the Kansas Pacific Railway Company sub-

scribed is \$9,992,500, and the amount paid in is \$9,689,950. Total amount of stock allowed by law, \$10,000,000. The receipts for the transportation of passengers for the year ending 30th June, 1875, were \$1,272,175.91; for freight, \$1,994,411.59; miscellaneous earnings, \$42,809.46; total, \$3,309,396.96. Expense of operating the road for the year, \$2,096,674.33, leaving net earnings \$1,212,722.63. The cost of construction and equipment of six hundred and seventy-two miles (main and branch line) has been \$34,359,540.66. The total funded debt of the company is \$27,242,600, of which \$6,303,000 is due the United States; other liabilities and indebtedness, \$3,723,375.41; total debt, \$30,965,975.41.

Stock of the Sioux City and Pacific Railroad Company to the amount of \$4,478,500 has been subscribed, of which \$1,791,400 has been paid in. The receipts for the year ending 30th June, 1875, from the transportation of passengers, were \$75,850.72; of freight, \$181,604.29; from express, \$3,518.85; and from miscellaneous sources, \$7,103.73; total, \$268,077.59. The expenses of the road and fixtures during that period were \$217,917.01, leaving net earnings \$50,160.58. Interest paid on first-mortgage bonds during the year, \$97,680. The bonded indebtedness of the company is \$3,256,320, of which \$1,628,320 is due to the United States. The floating debt is \$60,571.67.

The stock-subscription of the Southern Pacific Railroad Company of California is \$23,770,300, of which \$22,412,200 has been paid in. The amount received for transportation of passengers for the year ending 30th June, 1875, was \$761,637.61; of freight, \$998,869.01; total, \$1,760,506.62. The expenses of the road and its fixtures for the year were \$773,485.52, leaving net earnings, \$987,021.09. The indebtedness of the company is \$14,346,000. On the 23d day of August last, you accepted a section of this company's road, twenty miles, making 130.26 miles of the main line. By the twenty-third section of the act of 3d March, 1871, incorporating the Texas Pacific Railroad Company, the Southern Pacific Railroad Company of California was authorized to construct a line of railroad from a point at or near Tehachapa Pass, by way of Los Angeles, to the Texas Pacific Railroad, at or near the Colorado River. One hundred miles of this line have been completed and accepted, fifty miles of which were accepted by you on the 11th instant.

Northern Pacific Railroad stock to the amount of \$100,000,000 has been subscribed, and certificates for 202,326 shares of \$100 each have been issued. No new surveys and no change of line of road have been made. The amount received from passengers during the last fiscal year on the Pacific, Dakota and Minnesota divisions was \$178,391.98; the amount received from freight-transportation on those divisions for that period was \$371,903.33; earnings, \$605,041.63. The operating-expenses for the year were \$501,489.36. Net earnings, (exclusive of mail-earnings on the Dakota division,) \$103,532.27. The indebtedness of the Company is as follows: First-mortgage bonds, \$30,207,500; land-warrant bonds

and scrip issued for interest, \$753,000.96; floating debt, mainly notes of the company, \$683,000; total, \$31,643,500.96.

No report of the Atlantic and Pacific Railroad Company has been received.

On the 22d January last a section of 18.84 miles of the Cairo and Fulton Railroad, extending from Fulton to Texarkana, in Arkansas, was accepted, as well as 89.75 miles, extending from a point on the Mississippi River, opposite the mouth of the Ohio River, to the boundary-line between Missouri and Arkansas. This road is now completed.

On the 16th June last another section (twenty miles) of the Little Rock and Fort Smith Railroad was accepted, making one hundred and twenty miles completed and accepted.

Texas and Pacific Railway stock to the amount of \$50,000,000 is authorized by law, of which \$1,600,000 has been issued. Its indebtedness is as follows: Capital stock issued, \$1,600,000; 6 per cent. gold construction-bonds issued, \$10,093,000; 7 per cent. currency land-grant bonds issued, \$9,252,000. Debt of the Southern Pacific Railroad Company to the State of Texas, assumed by the Texas and Pacific Railway Company, \$200,885.90; floating debt, \$333,200.36; entire indebtedness, \$21,479,086.26. The receipts of the company for the year ending 30th June, 1875, were from passengers, \$323,681.51; freight, \$741,791.87; express service, \$11,407.92; mail, \$29,749.23; telegraph, \$7,073.70; rentals, \$71,134.04; miscellaneous, \$2,243.10; total, \$1,360,962.71. The expenses for the same period were, for conducting transportation, \$239,719.96; motive-power \$204,975.23; maintenance of way, \$224,571.53; maintenance of cars \$79,253.04; general expense, \$14,369.61; total, \$792,889.37; leaving net earnings, \$568,073.34. There are three hundred and twenty-six miles of this road in operation, six miles thereof having been completed since last report; one hundred miles are graded, bridged and tied ready for the iron. On the 9th August last, you accepted those portions of this road extending from Marshall to the boundary-line dividing Texas and Louisiana, from Marshall to Texarkana, Ark., and from Sherman to Brookston, Tex.; the act of 22d June, 1874, (18 Stat., 197) having declared said portions to "be deemed and taken to be a part of the said Texas and Pacific Railway, and shall hereafter be subject to all the provisions and limitations of the act of Congress incorporating said company, and of the supplements thereto." The company's assets are as follows: Three hundred and twenty-six miles of constructed and equipped road; one hundred miles of partly constructed and equipped road; three hundred and fifty miles of telegraph line, \$21,319,228.24 bills and accounts receivable, \$64,284.72; cash on hand, \$12,411.66 material on hand, \$83,161.64; total, \$21,479,086.26.

Denver Pacific Railroad stock to the amount of \$4,000,000 has been authorized by law, subscribed and paid in. Moneys received for transportation of passengers for the year ending 30th June, 1875, \$193,481.26 for freight, \$134,329.90; miscellaneous earnings, \$5,084.50; total

\$332,895.66. Expenses for the above year \$122,675; leaving net earnings \$210,220.66. Cost and equipment of road, \$6,493,800. The indebtedness of the company to that date was \$2,512,830.05.

CAPITOL.

The Architect reports that the Library of Congress and the Law Library have been supplied with a large amount of shelving; additional rooms in the central building have been fitted up for use as committee-rooms; the steam-boilers of the Senate wing have been thoroughly repaired; and that the whole building has been kept in good repair. The fire-engine house and the stables for the use of the mail-wagons of the Senate have been completed. Pursuant to the provisions of an act of Congress approved June 23, 1874, the Architect prepared plans for a building to be erected for the Women's Christian Association of the District of Columbia. A contract having been made for its construction, involving a sum within the limit prescribed in the act, the Architect reports that the building is now in course of erection, and will be ready for occupancy during the coming winter.

IMPROVEMENT OF CAPITOL GROUNDS.

The Architect refers to the report of Fred. Law Olmsted for details of the improvements made during the year in the Capitol grounds. In order that the surroundings of, and approaches to, the building may be finished in a manner commensurate with its grand proportions, the Architect recommends that due provision be made by Congress for changing the present rustic terraces, by widening them and facing them with a wall, and for the construction of grand stairs approaching the center of its western front, in accordance with Mr. Olmsted's plans. The grading required to carry out the plan for the eastern portion of the grounds has been completed, and the whole of the eastern and most of the western portion thereof have been provided with a complete system of road and sub-soil drainage, gas-lighting, and water-supply. The roads and walks of the eastern grounds, together with the carriage court, have been formed and gravelled, and the approach-drives to the western grounds formed and partially macadamized. The street-railroads north and south of the western grounds have been taken up and re-laid outside the limits of the Capitol grounds, and the stables and workshops, formerly situated at the northern, western, and southern angles of the western grounds, have been removed.

BENEVOLENT INSTITUTIONS.

INSANE ASYLUM.

During the year ending June 30, 1875, 912 patients were under treatment in the Government Hospital for the Insane; an increase of 63 over

the number treated the preceding year. Of the former number, 508 were from the Army and Navy, and 705 were males; 31 were pay patients; 58 died; and 136 were discharged—78 as recovered, 48 as improved, and 10 as unimproved; leaving under treatment at the end of said year 718 patients, of whom 428 were from the Army and Navy and 552 were males. During the year 230 persons, of whom 105 were from the Army and Navy, and 179 were males, were admitted to the hospital. The general health of the institution has been good. Three thousand eight hundred and nineteen persons have been treated in the hospital since it was opened.

During the last fiscal year the expenditures for support of the hospital, and for the necessary repairs and improvements authorized by Congress at its last session, amounted to \$160,325.59. The amount received during the same period for board of private patients was \$17,167.74, and that from the sale of produce \$2,408.37. The products of the farm and garden during the year were estimated to be worth \$18,292.70, and the live stock, farm and garden implements, &c., belonging to the hospital are valued at \$20,189.34.

The board of visitors submit the following estimates: For support of the hospital during the year ending June 30, 1877, \$155,895; enlarging and improving the gas-works, slaughter-house, laundry, and drainage of the building, and for the erection, furnishing, and fitting-up of an enlarged and improved bake-house, \$15,000; general repairs and improvements, \$10,000; and for the erection of a separate building for female patients, \$200,000; in all \$380,895.

The board of visitors state that but 563 patients can be properly accommodated in the present hospital building, whereas on the 30th of September last 727 persons were under treatment therein, being 16 patients in excess of its proper capacity. A careful examination of the reports of the institution during the past ten years shows an average increase in the number of patients treated during that period of over 10 per cent. per annum. It is stated by the board that the ordinary and very serious evils of overcrowding an institution for the insane can no longer be wholly avoided, and that the utmost vigilance is necessary to prevent distressing accidents and endemic disease. The recommendation of the board, therefore, seems eminently proper that some steps should be taken in the direction of a permanent enlargement of the hospital. After due consideration of the question as to the manner in which the institution should be enlarged so as to best subserve the welfare of its inmates, the board have reached the unanimous conclusion that the best plan for attaining the object desired will be to erect a separate building for female patients. Of the number of patients under treatment on the 30th of September last, 561 were males, or only two less than the number that can be properly accommodated therein as above stated. It is apparent, therefore, should the proposition to erect a separate building for female patients be favorably acted upon.

by Congress, that the present building would be fully occupied by male patients.

Many considerations are presented by the board showing the advantages that will accrue from separating the sexes, and, as it is obvious that the rapidly increasing number of patients in the hospital renders its enlargement necessary at an early day, I regard the recommendations of the board as worthy of favorable consideration by Congress. The estimated cost of the proposed building for female patients, complete and ready for occupation, is \$395,000; and the sum of \$200,000 is now asked for, in order that its erection may be commenced at once.

It is proposed by the board to erect the department for women on the farm of 175 acres lying on the east side of the public road which runs through the hospital-grounds, relinquishing the present buildings, surrounded by 185 acres of land, and having a water-front for fishing, boating, and bathing, to the exclusive use of the men.

DEAF AND DUMB ASYLUM.

During the year ending June 30, 1875, 102 pupils, 13 of whom were females, received tuition in the Columbia Institution for the Deaf and Dumb. Of the whole number, 53, representing twenty-one States and the District of Columbia, were in the collegiate, and 49 in the primary department. The receipts of the institution during the year were \$53,716.42, and the disbursements, \$49,724.61, leaving an unexpended balance of \$3,991.81, of which, however, about \$1,900 will be expended for coal, contracted for but not delivered, within the year.

The Baker library, comprising between five and six hundred books, a large majority of which are devoted exclusively to the subject of deaf-mute instruction, has been secured for the use of the institution. During the year the appropriation made by Congress at its last session for the erection and fitting up of buildings has been expended in completing two dwelling-houses and in partially erecting the walls of the college building.

The estimates submitted for the next fiscal year are as follows: For the support of the institution, \$48,000; for continuing the erection and fitting up of buildings, \$50,000; for the inclosure, improvement, and care of the grounds of the institution, \$10,000; and for the necessary repairs of buildings already completed, \$2,000; in all, \$110,000.

FREEDMEN'S HOSPITAL.

The annual report of the surgeon in-chief of the Freedmen's Hospital furnishes some interesting information in relation to the origin of the institution. During the last fiscal year 480 patients were treated in the hospital and asylum; the inmates of the Colored Orphan's Home, over ninety in number, received medicines and attendance whenever necessary; 64 out-patients were furnished with subsistence, medical attend-

ance, and clothing; and 466 dispensary patients were prescribed for. Of the number treated in the hospital and asylum, (480,) 191 were admitted during the year; 144 were discharged—114 as cured and 30 relieved; and 71 died; leaving 265 patients under treatment on the 30th day of June, 1875.

PROVIDENCE HOSPITAL.

Congress having appropriated the sum of \$15,000, or so much thereof as may be necessary, to be expended under the direction of the Secretary of the Interior, for the "care, support, and medical treatment of 75 transient paupers, medical and surgical patients, in some proper medical institution in the city of Washington, or in the District of Columbia, under a contract to be formed with such institution," a contract for this purpose was entered into, on the 5th of June last, with the Sister Superior of Providence Hospital, to take effect from and after July 1, 1875. On the 30th of June last 117 patients, admitted to the hospital under a previous contract, remained under treatment, and during the three months next ensuing 137 persons were admitted under the present contract, making a total of 254 patients treated therein during the quarter. Of this number, 112 were discharged and 12 died, leaving 130 patients in hospital on the 30th ultimo.

COLUMBIA HOSPITAL FOR WOMEN.

During the last fiscal year 2,696 women received treatment at the Columbia Hospital for Women and Lying-in Asylum, of whom 2,582 were received during the year. Of the whole number, 343 were treated in hospital, and 2,353 in the dispensary. Eighteen hundred and ninety-one patients were cured, 349 relieved, 28 died, 40 were discharged incurable, and the results of 174 cases are unknown; leaving 214 cases under treatment at the end of the year. Four hundred and four patients were natives of foreign countries, and 1,076 were residents of the District of Columbia.

The estimates for the next fiscal year are as follows: For the support of the institution, over and above the probable amount to be received from pay-patients, \$24,300, and for a new roof to the building \$9,500 a total of \$33,800.

GEOLOGICAL SURVEY.

The results of the geological and geographical survey of the Territories, conducted during the past season by Messrs. Hayden and Powell, under the direction of this Department, will, it is believed, equal in interest and importance those of any previous year. In addition to the practical knowledge thus obtained of the characteristics and resources of extensive sections of our territorial domain, the survey has performed timely service in making collections of fossils, Indian curiosities, prehistoric relics, &c., for a more complete representation of such

Objects, in connection with the collection now in the Smithsonian Institution, at the Centennial Exhibition of 1876.

The survey under F. V. Hayden continued its labors of the two preceding years in the Territory of Colorado. The field of work during the past season was the southern and western portions of said Territory, and including a belt, fifteen miles in width, of the northern border of New Mexico, and the eastern border of Utah. The survey was divided into seven parties, four of which were devoted to topographical and geological labors, one to primary triangulation, one to photographic work, and one to the transportation of supplies.

The survey of the southern and southwestern portions of Colorado has been completed, so as to make six sheets of the physical atlas, designed by this Department, leaving unexplored only the northwestern corner thereof, which can be surveyed by a single party during the coming year. The districts explored the past season were not so mountainous as those of previous years, but were quite remote from settlements, and in perhaps the most inaccessible regions of this continent. The total area surveyed was about 30,000 square miles, portions of which were very rugged. Much of this area is drained by the Colorado River, and is mainly a Plateau country, cut in every direction by deep gorges or cañons, the sides of which show, for geological investigation, admirable sections of the strata forming the earth's crust. The topography of the district surveyed was elaborated in detail by the aid of the plane-table.

The exploration of the remarkable prehistoric ruins of Southern Colorado, glimpses of which were obtained the preceding season, was continued with great success. They were traced down the cañons to the Colorado River in New Mexico, Utah, and Arizona, and their connection established with the cliff-cities of the Moquis of the latter Territory. Hundreds of cave-dwellings, of curious architecture and many miles from water, were found in the sides of the gorges, and the ruins of extensive towns discovered in the adjacent plains, indicating the former existence of a people far more numerous and advanced in the arts of civilization than their supposed descendants of the present day. Of these ruins many interesting sketches, plans, and photographs were made, and a valuable collection of flint weapons, earthen-ware, and other specimens was gathered. The materials thus obtained will enable the survey to present an exhaustive report on this interesting subject. The photographer of the survey obtained a series of mountain views on plates 24 inches long by 20 wide, or larger, by several inches, than any landscape-photographs ever before taken in this country.

The survey under J. W. Powell continued the labors of the preceding year in the Territory of Utah. Nearly ten thousand square miles of country were surveyed during the season just closed. This area is much diversified in surface, containing two important ranges of mountains and extensive table-lands; the whole drained by the Colorado River and its tributaries. The field of labor was extended into the western portion of

Colorado, for the purpose of connecting its work with that of the survey under Dr. F. V. Hayden ; and, also, into the southern part of Wyoming, in order to connect with the work of the survey of the fortieth parallel, conducted in past years by Clarence King. For a correct delineation of the topographic features of the country, a connected plane-table sketch was made over the entire area, and, as accessory data, perspective profile sketches, showing the characteristics of the slopes, and drainage-sketches, indicating the meandering of water-courses, the outlines of cañons and valleys, &c., were taken.

The whole area surveyed during the season is classified by Mr. Powell as follows: Pasture-lands, 50 per cent.; timber-lands, 9 per cent.; mineral-lands, 4 per cent.; irrigable lands, less than 1 per cent.; and the remainder, over 36 per cent., waste lands. The distribution of these lands will be represented, in appropriate colors, on the physical atlas. The collections, made during the year, in ethnography, paleontology, geology, and lithology were unusually large; and copies of prehistoric etchings discovered on the cañon-walls and rock-escarpments of the country, with a large number of photographic views, illustrative of its geological and geographical characteristics, were taken. The location of numerous dwellings, once occupied by the ancient inhabitants of the country, will be indicated on the ethnographic map of the survey. Mr. Powell reports that he will soon publish a table showing the groups of sedimentary strata of the Colorado plateau, based, primarily, on the study of its structural geology, but fully confirmed by its paleontology.

NEW JAIL.

The new jail in and for the District of Columbia is rapidly approaching completion. It appears, from the report of the supervising architect, that the progress of the work was somewhat retarded by delay on the part of the contractors in furnishing cut stone. He states, however, that the work has progressed rapidly during the past six months, and that the building will be roofed in and practically finished, ready for the reception of prisoners, before the 1st of December next.

Contracts were awarded during the year ending October 31 last, by the board of jail-commissioners, for cut stone, iron-work, roofing-slate, heating and ventilating apparatus, plumbing and gas-fitting, kitchen-apparatus, sheet-copper work, roofing-paper, plastering, and labor and mortar for completion of the building. The supervising architect states that, upon the completion of the jail, the several appropriations made by Congress for the purpose, amounting to the sum of \$535,548.93, will have been expended. He submits the following estimates : For inclosing-walls, \$45,000; coal-vault, \$5,000; guard-house, \$6,000; three elevators, \$8,000; and for continuing the sewer from its present outlet to the bank of the Anacostia, \$3,000; a total sum of \$67,000. This sum, if appropriated, when added to former appropriations, would make the total cost of the jail \$602,548.93.

ADDITIONAL ROOM.

I desire to renew the recommendation made by several of my predecessors in regard to the urgent need of more room than is now afforded for the proper accommodation of the clerical force, and for the better care and preservation of the files and records, of the several Bureaus of the Department. The steady increase in the public business committed to my supervision makes this want more pressing with each recurring year, and it is becoming a matter of absolute and imperative necessity that some means be adopted to meet the needs of the Department in this respect.

I am, sir, very respectfully, your obedient servant,

Z. CHANDLER,
Secretary of the Interior.

The PRESIDENT.



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The Architect reports that the Library of Congress and the Law Library have been supplied with a large amount of shelving; additional rooms in the central building have been fitted up for use as committee-rooms; the steam-boilers of the Senate wing have been thoroughly repaired; and that the whole building has been kept in good repair. The fire-engine house and the stables for the use of the mail-wagons of the Senate have been completed. Pursuant to the provisions of an act of Congress approved June 23, 1874, the Architect prepared plans for a building to be erected for the Women's Christian Association of the District of Columbia. A contract having been made for its construction, involving a sum within the limit prescribed in the act, the Architect reports that the building is now in course of erection, and will be ready for occupancy during the coming winter.

IMPROVEMENT OF CAPITOL GROUNDS.

The Architect refers to the report of Fred. Law Olmsted for details of the improvements made during the year in the Capitol grounds. In order that the surroundings of, and approaches to, the building may be finished in a manner commensurate with its grand proportions, the Architect recommends that due provision be made by Congress for changing the present rustic terraces, by widening them and facing them with a wall, and for the construction of grand stairs approaching the center of its western front, in accordance with Mr. Olmsted's plans. The grading required to carry out the plan for the eastern portion of the grounds has been completed, and the whole of the eastern and most of the western portion thereof have been provided with a complete system of road and sub-soil drainage, gas-lighting, and water-supply. The roads and walks of the eastern grounds, together with the carriage court, have been formed and graveled, and the approach-drives to the western grounds formed and partially macadamized. The street-railroads north and south of the western grounds have been taken up and re-laid outside the limits of the Capitol grounds, and the stables and workshops, formerly situated at the northern, western, and southern angles of the western grounds, have been removed.

BENEVOLENT INSTITUTIONS.

INSANE ASYLUM.

During the year ending June 30, 1875, 912 patients were under treatment in the Government Hospital for the Insane; an increase of 63 over

the number treated the preceding year. Of the former number, 508 were from the Army and Navy, and 705 were males; 31 were pay-patients; 58 died; and 136 were discharged—78 as recovered, 48 as improved, and 10 as unimproved; leaving under treatment at the end of said year 718 patients, of whom 428 were from the Army and Navy, and 552 were males. During the year 230 persons, of whom 105 were from the Army and Navy, and 179 were males, were admitted to the hospital. The general health of the institution has been good. Three thousand eight hundred and nineteen persons have been treated in the hospital since it was opened.

During the last fiscal year the expenditures for support of the hospital, and for the necessary repairs and improvements authorized by Congress at its last session, amounted to \$160,325.59. The amount received during the same period for board of private patients was \$17,167.74, and that from the sale of produce \$2,408.37. The products of the farm and garden during the year were estimated to be worth \$18,292.70, and the live stock, farm and garden implements, &c., belonging to the hospital are valued at \$20,189.34.

The board of visitors submit the following estimates: For support of the hospital during the year ending June 30, 1877, \$155,895; enlarging and improving the gas-works, slaughter-house, laundry, and drainage of the building, and for the erection, furnishing, and fitting-up of an enlarged and improved bake-house, \$15,000; general repairs and improvements, \$10,000; and for the erection of a separate building for female patients, \$200,000; in all \$380,895.

The board of visitors state that but 563 patients can be properly accommodated in the present hospital building, whereas on the 30th of September last 727 persons were under treatment therein, being 164 patients in excess of its proper capacity. A careful examination of the reports of the institution during the past ten years shows an average increase in the number of patients treated during that period of over 10 per cent. per annum. It is stated by the board that the ordinary and very serious evils of overcrowding an institution for the insane can no longer be wholly avoided, and that the utmost vigilance is necessary to prevent distressing accidents and endemic disease. The recommendation of the board, therefore, seems eminently proper that some steps should be taken in the direction of a permanent enlargement of the hospital. After due consideration of the question as to the manner in which the institution should be enlarged so as to best subserve the welfare of its inmates, the board have reached the unanimous conclusion that the best plan for attaining the object desired will be to erect a separate building for female patients. Of the number of patients under treatment on the 30th of September last, 561 were males, or only two less than the number that can be properly accommodated therein, as above stated. It is apparent, therefore, should the proposition to erect a separate building for female patients be favorably acted upon

by Congress, that the present building would be fully occupied by male patients.

Many considerations are presented by the board showing the advantages that will accrue from separating the sexes, and, as it is obvious that the rapidly increasing number of patients in the hospital renders its enlargement necessary at an early day, I regard the recommendations of the board as worthy of favorable consideration by Congress. The estimated cost of the proposed building for female patients, complete and ready for occupation, is \$395,000; and the sum of \$200,000 is now asked for, in order that its erection may be commenced at once.

It is proposed by the board to erect the department for women on the farm of 175 acres lying on the east side of the public road which runs through the hospital-grounds, relinquishing the present buildings, surrounded by 185 acres of land, and having a water-front for fishing, boating, and bathing, to the exclusive use of the men.

DEAF AND DUMB ASYLUM.

During the year ending June 30, 1875, 102 pupils, 13 of whom were females, received tuition in the Columbia Institution for the Deaf and Dumb. Of the whole number, 53, representing twenty-one States and the District of Columbia, were in the collegiate, and 49 in the primary department. The receipts of the institution during the year were \$53,716.42, and the disbursements, \$49,724.61, leaving an unexpended balance of \$3,991.81, of which, however, about \$1,900 will be expended for coal, contracted for but not delivered, within the year.

The Baker library, comprising between five and six hundred books, a large majority of which are devoted exclusively to the subject of deaf-mute instruction, has been secured for the use of the institution. During the year the appropriation made by Congress at its last session for the erection and fitting up of buildings has been expended in completing two dwelling-houses and in partially erecting the walls of the college building.

The estimates submitted for the next fiscal year are as follows: For the support of the institution, \$48,000; for continuing the erection and fitting up of buildings, \$50,000; for the inclosure, improvement, and care of the grounds of the institution, \$10,000; and for the necessary repairs of buildings already completed, \$2,000; in all, \$110,000.

FREEDMEN'S HOSPITAL.

The annual report of the surgeon in-chief of the Freedmen's Hospital furnishes some interesting information in relation to the origin of the institution. During the last fiscal year 480 patients were treated in the hospital and asylum; the inmates of the Colored Orphan's Home, over ninety in number, received medicines and attendance whenever necessary; 64 out-patients were furnished with subsistence, medical attend-

that an appropriation be made, to be distributed as additional compensation to those having in charge the most important and difficult agencies.

No matter what particular policy may be pursued in regard to the Indian, I believe that the one feature of educating him and making him self-supporting, or as nearly so as possible, must always be steadily adhered to. The alternative cannot fail to be gradual extinction of the race. If he is to be taught, the success must depend upon the teacher, and the best material attainable should be secured, and paid accordingly. The sooner he is taught to provide for his own support, the earlier the Government will be relieved therefrom.

With the exception of the troubles in Dakota, with the hostile Sioux, we may say that, practically, all of the Indians are upon reservations entirely under the control of the Department, and making commendable improvement. It is believed that by spring the trouble in Dakota will be ended and all liability of Indian wars in the future removed.

Trouble with the non-treaty Indians, consisting principally of renegades from various tribes under the leadership of Sitting Bull, had been foreseen for a long time, and the services of the Army were finally invoked to put a stop to the pillaging and outrages perpetrated by them upon the white settlers and friendly Indians in their vicinity.

Reports had been received showing that 60 white men had been killed and half a million dollars' worth of property destroyed by them, and their depredations had become simply unbearable.

The unchecked course of this band was one of the greatest drawbacks to the success of our agents among the remaining Sioux and other bands in Dakota and Montana, and it became necessary to turn them over to the War Department to be brought in upon the reservations. This is being rapidly done, and, but for the disastrous and sad fate of General Custer and his brave command, would have been consummated, in all probability, with slight loss to our forces. The similar trouble with bands in the Southwest, a few years since, was successfully removed, and to-day the Kiowas, Comanches, and Apaches are fully under control, and realize their better condition sufficiently to make it entirely improbable that any future difficulty will arise which cannot readily be disposed of by our civil officers.

To what extent the difficulties in the North were increased by the tardy passage by Congress of the annual appropriations, and the consequent dissatisfaction and suspicion of many of those Indians, before friendly, inducing them to join the hostiles, it would be difficult to determine, but that the effect was to materially strengthen Sitting Bull's band is undoubtedly true.

The Indian Bureau deserves great credit for its efforts to prevent dissatisfaction and discontent among the Indians at the reservations, and did all that could be done to prevent the recent troubles. It may be hoped that the results of the visit of the present commission to the Red

Cloud and Spotted Tail agencies and the agencies on the Missouri River will aid most materially in solving the Sioux problem. They have certainly secured the removal of the Sioux in Northern Nebraska to either the Indian Territory or the Missouri River, with full relinquishment of any claims to the Black Hills or rights in Montana, and the establishment of roads across the reduced reservation from the Missouri River to the Black Hills. The northern line of the reservation is to be changed from the forty-sixth parallel, which is a boundary-line unintelligible to the Indian, to the natural boundary of the South Fork of and main Cannon Ball River. The commission will not complete its labor and make a report for some time to come; but when their report is received, it will be transmitted to you, with such further views upon the Sioux question as may be suggested thereby.

I desire to express my warm appreciation of the hearty co-operation of the War Department and its aid and assistance at the various Sioux and other agencies in Dakota, at all of which quiet and order have been maintained.

For the general government of the Indians the Commissioner recommends three principles of policy, which he supports by able and convincing arguments and in which I most heartily concur: The concentration of all the Indians upon a few reservations, acceptance by them of lands in severalty, and the extension over them of the United States law and jurisdiction of United States courts, and consequent dissolution of tribal organization.

For several years the number of agencies has been decreased, as it has been found that their occupants could be removed and consolidated with other tribes upon one reserve or could be settled in the Indian Territory. Within the last four years one superintendency and twenty-two agencies have been abolished, with a corresponding reduction of agents and employés, and an annual saving in salaries and wages amounting to over \$60,000.

As a matter of economy, the greatest saving could be made by uniting all the Indians upon a few reservations; the fewer the better. A much less number of employés would be required at correspondingly less expense, but a greater saving would result from the reduction of transportation. Many of the agencies are almost inaccessible during certain months of the year for the purpose of reaching them with provisions, and it can only be done at very great expense. To reach some few of them the transportation equals, if not exceeds, the first cost of the provisions.

Were there but five or six large reservations, easy of access, the annual saving in transportation alone would be over \$100,000.

The good example of those successfully started in agricultural pursuits stimulates the desire of the more ignorant who may be brought upon the same reserve. Teaching is rendered far easier and more successful. Good results have invariably attended the

concentration of Indians friendly to each other, and while the plan is not free from difficulty, and may take a long time before all can be brought together in the Indian Territory or upon some three or four large reserves, yet it has been demonstrated that every step taken in that direction is beneficial, and I do not doubt the feasibility of the plan. If, as the Commissioner recommends, the President were authorized by law to remove, whenever in his judgment it might be deemed practicable, any tribe or band, or a portion of a tribe or band, to the Indian Territory, or to either of two prominent reservations—and he names the White Earth in Minnesota and the Yakama in the southern part of Washington Territory—and suitable appropriation placed at his disposal to enable him to do so, there is no doubt that the success of such removals would be apparent within the next two or three years. Many of the present reservations are entirely unfit for cultivation, and the disappearance of game, which is rapidly growing scarce, leaves their occupants solely dependent upon the care of the Government for their support; and this condition cannot be improved till they are located upon soil suitable for agriculture and stock-raising.

Some few of the reservations located on mineral lands are or will be subject to the same conditions with which we have lately had to contend in the case of the Black Hills. In the past the inevitable result of the discovery of rich mineral deposits has been the possession by the miners of the locality in which it is found. If upon Indian ground, great trouble must ensue unless the Indians are powerless to resist the aggression and protect their rights, which in any event are lost sight of.

Briefly, the arguments are all in favor of the consolidation; expensive agencies would be abolished, the Indians themselves can be more easily watched over and controlled, evil-designing men be the better kept away from them, and illicit trade and barter in arms, ammunition, and whisky prevented; goods could be supplied at a great saving; the military service relieved; the Indians better taught, and friendly rivalry established among them, those most civilized hastening the progress of those below them, and most of the land now occupied as reserves, reverting to the General Government, would be open to entry and sale.

As soon as the Indian is taught to toil for his daily bread and realize the sense of proprietorship in the results of his labor, it cannot but be further to his advantage to be able to appreciate that his labor is expended upon his individual possessions and for his personal benefit. As long as the land is cultivated and the products owned in common, the homely truth that what is every man's business is no one's, will generally prevail, and the agent with his employés do the most of the farming. The Indian must be made to see the practical advantage to himself of his work, and feel that he reaps the full benefit of it. Everything should teach him that he has a home, not only in common with his tribe, but a hearth-stone of his own around which he can gather his family, and in its possession be entirely secure and independent.

The Commissioner's recommendations for the allotments of lands to Indians in severalty—such allotments to be inalienable for a term of years—must ultimately be adopted, and I warmly favor its consideration.

In my annual report last year I took occasion to quote from the report of the commission appointed during that year to visit the Red Cloud and Spotted Tail agencies, in regard to the urgent necessity of laws for the protection and punishment of Indians. In previous reports of the Department the same subject has been repeatedly alluded to, and the absence of any proper means for the administration of justice over Indian Territory presented. The present law is entirely inadequate to punish an Indian for a crime committed against another, either without the limits of his reservation or upon it. The only punishment which can be inflicted upon a white man for a crime against an Indian is to force him off the reservation. This immunity for crime is most unfortunate, and loudly calls for correction. Were the jurisdiction of the United States courts extended over the reservations, and the Indian taught that he must suffer the same penalty for his crime as a white man, and at the same time be protected in like manner, the labors of the Department would be made much easier.

A few years ago the first thing considered necessary of accomplishment was to gain oversight and control of the Indians by inducing them to give up their roving habits and gather them upon a reservation, where, by feeding them and rendering unnecessary a ceaseless chase for game, an opportunity could be obtained of watching and teaching them. This has practically been accomplished.

The next important thing was to teach them the way to cultivate and produce their own food, and so be able to supply their own wants when restricted to a limited territory, and educate in them a taste for such pursuits and a relinquishment of the natural desire to roam. This is being accomplished, and we have every reason to be satisfied with the progress attained.

To concentrate them and induce them to cultivate each for himself an individual farm, belonging wholly and completely to himself, is the next great step to be taken; but how can we expect the Indian himself to succeed if we do not surround him with the protection and guarantee of law? If it is so essentially required for the punishment and restraint of the bad, it is still more for the protection of the well-inclined.

Though the plan of uniting all the Indians upon a few reservations and allowing them lands in severalty may meet opposition, and must necessarily, if favorably considered, be a work of time, yet the enactment of suitable laws for the government of Indians should be delayed no longer. I beg that you will call this especially to the attention of Congress.

The necessity of devising some simple and satisfactory form of government for the Indian Territory is yearly growing more urgent, and

must, ere long, be met. At present the eastern and richest portion, agriculturally, is occupied by the Cherokees, Choctaws, Chickasaws, Creeks, and Seminoles, numbering something over 55,000 souls, with a total of 20,784,890 acres, or an average of 375 acres for each man, woman, and child among them. So long as this greatly disproportionate allowance of land to the individual continues, the greater portion of it must lie idle and unproductive and be the object of desire to the white settler. The easiest way to secure that Territory to its present occupants and protect it from the encroachments of white settlement, is to people it by other Indians, and, giving them all in severalty sufficient land for each to cultivate and take care of, prohibit any transfer to a white man, and only from one Indian to another under great restriction. There is no doubt but the portion of the Territory lying between the 98th meridian and its eastern boundary is sufficiently large for the occupation of all the Indians that can be removed there. Were it possible to get them all there there would be an average of 75 acres for each of the 275,000 Indian men, women, and children in the country.

Within those limits is embraced a section of territory about the size of the State of Ohio, unexcelled in fertility of soil, and a climate unsurpassed in the United States. By requiring its present occupants to accept liberal allotments in severalty their further claims may be adjusted by awarding proper compensation for the land they do not need and cannot occupy; and while no injustice to those Indians now there should be permitted, I believe such allotments and purchase of the remaining lands would subserve their best and truest interests.

The sooner the idea of considering and treating the various tribes in the Indian Territory as possessing a sort of independent power and nationality is done away with, the earlier will we reach some practical solution of the embarrassments which now surround the question of their government. The most of these people have made great advancement in civilization, and many are fit to embrace the full advantages of citizenship. They are under the care of the Government as much as any other portion of its people, and it is as responsible and in some respects more responsible for their welfare. There is no reason why the laws and jurisdiction of the courts should not be extended over them and they be treated the same as any other like portion of our population, and some form of territorial government devised which shall secure for them, as guaranteed, the exclusive occupancy of their territory by Indians, and, while protecting them from the encroachments of the whites, provide the necessary means for the protection and government of themselves.

Among the general recommendations of the Commissioner, I beg to call your attention to that for a further appropriation for the removal to, and establishment in the Indian Territory of the Poncas. Congress appropriated \$25,000 for this purpose at its last session, which is not sufficient for their removal, and the purchase from other tribes of the land

upon which to locate them. The early settlement of this tribe in the Indian Territory is desirable.

Legislation by Congress is recommended authorizing the allotment to the La Pointe band of Chippewa Indians of some twenty-two sections of land known as the Red Cliff reservation, in order to carry out the terms of the treaty made with them September 30, 1854.

A large portion of the Quapaws are living with the Osages in the Indian Territory and are desirous of consolidating with them. Their lands are desirable for the Poncas, of whose removal to the Territory I have spoken, and authority is asked to negotiate the sale of this reservation to the Poncas and the settlement of all the Quapaws with the Osages.

Stringent legislation is required to prohibit the sale of liquor to Indians off of their reservations, and it is recommended that it be made a penal offense to sell liquor to an Indian anywhere.

I would call attention to the claim of the Sioux for \$25,000, for which they accepted the pledge of the Secretary of the Interior at the time of their visit here in May, 1875, that should they consent to the cession of their right to hunt in Nebraska, and such rights as they possessed in Nebraska south of the divide of the Niobrara River, which by the treaty of 1868 was to remain Indian territory, he would urge that such an appropriation be made for them. This pledge was looked upon by them as equivalent to a promise of the money, and the failure last session to provide it has been a source of embarrassment to the commission now engaged in securing the moving of portions of the Sioux to the Indian Territory. It has been regarded by the Indians as a breach of faith. The Commissioner recommends the favorable consideration of this claim.

I can report that the lands of the Eastern Cherokees of North Carolina, lately in litigation, have been secured to them, and they are now in a condition of comparative independence. It has been attempted to erect a quasi-tribal organization there, which is not only unnecessary but mischievous, and I recommend legislation dissolving any tribal organization and providing for a division of the land.

I have also to report the successful removal to the San Carlos reserve of the Apaches from the Chiricahua reservation, and its abolishment. The close proximity of these Indians to the Mexican border gave opportunity for frequent excursions into Sonora, and was a ceaseless source of trouble. The extremely broken, mountainous character of the country rendered it impossible to follow and punish these marauding parties; and, as the Indians had not been disarmed, and could so readily elude any force sent to compel their removal, the Indian Department may be congratulated upon its successful accomplishment.

The removal of the Pawnees from Kansas to the Indian Territory has been completed, and this tribe is now upon a valuable reservation ceded by the Cherokees. Three hundred and fifty acres have been put under cultivation, 28 buildings have been erected, and two schools established.

In accordance with the provisions of the act of April 10, 1876, appraisers have been appointed to appraise the land belonging to the Pawnees in Kansas which they have vacated.

The report of the present condition of the Cheyennes and Arapahoes, and the Kiowas and Comanches, who, so lately as last year, were dismounted and disarmed, and who were at that time classed as equally intractable and violent as the Sioux, is remarkable for the progress it shows they have made in peaceful pursuits and the desire evinced for the education of their children. So great is this desire that, had we greater facilities for taking care of and teaching them, a much larger number of children could be gathered in the schools.

I have lately named a commission, consisting of three civilians and two Army officers, to examine certain questions of disagreement between the Nez Percé Indians, in Idaho, and the settlers in their neighborhood, and also to report upon the subject of reducing the number of reservations in Oregon and Washington and Idaho Territories. Sufficient time has not elapsed to receive any report of their action.

The Osages, numbering some 3,000, are in a condition of great destitution. They have been great sufferers by a flood which carried away their fences and the greater part of their crops. They have been in the habit of supplying their wants in great part from the chase of the buffalo; but during the last season this has been a failure. They have abundant funds in the hands of the Government to supply all their requirements in the way of food, clothing, and necessary farming implements, and ask that in their most pressing need they be allowed to use it. The time of payment by the settlers upon their lands in Kansas was extended by the Government, or the interest would now supply their wants. I respectfully recommend that you urge upon Congress its early consideration of this matter at its coming session.

In accordance with the requirements of the act of June 10, 1876, within the time prescribed, all stocks, bonds, and other securities held in trust for Indian tribes were transferred to the custody of the Treasurer of the United States. In this connection I would renew my recommendation that as such bonds and stocks mature and are paid, instead of being required to re-invest in new bonds, which have to be purchased at a premium, thus reducing the principal, the money be allowed to remain in the Treasury and the Government pay thereon a just and equitable rate of interest.

PUBLIC LANDS.

During the year ending June 30, 1876, public lands were disposed of as follows:

	Acres.
Cash sales	640,691.8
Military-warrant locations.....	137,640.0
Homestead entries.....	2,875,909.6
Timber culture entries	607,984.8
Agricultural-college-scrip locations.....	2,320.0

Approved to States as swamps	1,008,005.52
Certified to railroads	1,001,778.34
Certified for agricultural colleges.....	42,000.09
Certified for common schools.....	127,036.15
Certified for universities.....	4,460.44
Certified for public buildings.....	3,118.84
Approved to States for internal improvements	52,331.56
Sioux half-breed-scrip locations	1,568.74
Chippewa half-breed-scrip locations.....	19,480.27
 Total	 6,524,326.36

a quantity less by 545,944.93 acres than that disposed of the preceding year.

The cash receipts were \$1,747,215.85; a sum less by \$32,400.42 than that received the previous year.

During the year 21,806,517.25 acres were surveyed, making, with the quantity previously surveyed, 702,059,611.47 acres, and leaving yet to be surveyed 1,132,665,244.53 acres.

The quantity of land taken up under the homestead and timber-culture acts is 661,966.68 acres greater than that reported last year. As these entries are generally by actual settlers, the increase is at once gratifying and encouraging.

The Commissioner, in his report, ably discusses various questions relating to subjects placed by law under his control. I would especially commend to the consideration of Congress his views, which were those of his immediate predecessor, as to the disposal of lands west of the one hundredth meridian of longitude; of pine and other timber lands; as to the consolidation of the pre-emption and homestead laws; the correction of errors in the Revised Statutes; the publication of maps; the furnishing his office with a law library; as to the land offices at Chillicothe, Ohio, Indianapolis, Ind., and Springfield, Ill.; the Osage ceded lands; and the clerical force in his office.

RAILWAYS.

The facts and figures herein set forth are compiled from the annual reports of the companies.

Stock of the Union Pacific Railroad Company to the amount of \$36,783,000 has been subscribed, of which \$36,762,300 has been paid. The receipts for the year ending June 30, 1876, were, from transportation of passengers, \$4,201,807.89; of freight, \$6,923,614.85; and from miscellaneous sources, \$988,567.95; total, \$12,113,990.69. These figures include "the amounts earned from, but withheld by, the United States, for transportation of its passengers, freight, and mails." The expense of operating the road for the year was \$5,447,819.27, leaving net earnings \$6,666,171.42. The cost of the road has been \$114,465,652. The Omaha bridge cost \$2,866,463.72. The total bonded indebtedness of the company is \$79,072,312, of which \$27,236,512 is due to the United States.

The amount of stock subscribed in the Central Pacific Railroad Com-

pany of California is \$32,603,800, of which \$54,275,500 has been paid. The receipts for the year ending June 30, 1876, from transportation of passengers were \$5,448,769.04, and of freight, \$9,161,631.15; total, \$14,610,400.19. The operating expenses of the road for the year were \$6,889,945.58, leaving net earnings to the amount of \$7,720,454.61. At the close of said year the indebtedness of the company amounted to \$89,061,508.43, of which \$27,855,680 is due to the United States. This company embraces, by consolidation, (besides the original Central Pacific Company,) the Western Pacific, the California and Oregon, the San Francisco, Oakland and Alameda, and the San Joaquin Valley Companies.

Stock of the Central Branch Union Pacific Railroad Company to the amount of \$1,000,000 has been subscribed, of which \$980,600 has been paid. The receipts for the year ending June 30, 1876, were, from transportation of passengers, \$34,946.28, and of freight, \$79,467.84; total, \$114,414.12. The amount expended in said year for running expenses and repairs was \$131,500.67. The road and fixtures have cost \$3,763,700. The company's indebtedness, in addition to the Government loan, and first mortgage of \$1,600,000 and interest unpaid, is \$148,739.94.

The amount of stock of the Kansas Pacific Railroad Company allowed by law is \$10,000,000. Of this \$9,992,500 has been subscribed, and \$9,689,950 paid. The receipts for the year ending June 30, 1876, were, from transportation of passengers, \$1,085,199.70; of freight, \$2,120,009.17; miscellaneous, \$29,945.67; total, \$3,235,154.54. Total expenses of the year, \$1,827,980.40; leaving net earnings, \$1,407,174.14. The funded debt of the company is \$27,247,100, of which \$6,303,000 is due to the United States. There are other liabilities to the amount of \$3,554,525.13, making the entire debt of the company \$30,801,625.13.

Stock of the Sioux City and Pacific Railroad Company to the amount of \$4,478,500 has been subscribed, of which \$1,791,400 has been paid. The receipts for the year ending June 30, 1876, from transportation of passengers, were \$80,779.39; of freight, \$200,987.30; from express, \$2,657.83, and from miscellaneous sources, \$8,064.62; total, \$292,489.14. The expenses of the road and fixtures during said year were \$264,194.83, leaving net earnings \$28,294.31. The bonded indebtedness of the company is \$3,256,320, of which \$1,628,320 is due to the United States. The floating debt is \$70,395.78.

Stock of the Southern Pacific Railroad Company of California to the amount of \$28,585,300 has been subscribed, of which \$27,227,200 has been paid. The amount received from transportation of passengers in the year ending June 30, 1876, was \$949,945.42; of freight, \$1,186,673.30; total, \$2,136,618.72. The expenses of the road and fixtures for said year were \$1,140,329.63, leaving net earnings \$996,289.09. The bonded indebtedness of the company is \$19,984,000.

On the 16th June last you accepted the seventh section (of 20 miles each) of the main line of this road, and, on the 21st July last, the third

section (of 50 miles each) of its branch line, authorized by the twenty-third section of the act of March 3, 1871.

The Northern Pacific Railroad Company has been re-organized, and provision made for the conversion of the outstanding bonds of the company into "preferred stock," and of its stock into "common stock." Up to June 30, 1876, of preferred stock there had been issued to bondholders, who had surrendered their bonds for conversion, 333,459 shares, of \$100 each, and scrip for fractions of shares amounting to \$198,234. No "common stock" has yet been issued.

The amount received from transportation of passengers for the year ending June 30, 1876, was \$193,923.77; of freight, \$424,061.96; from miscellaneous sources, \$75,946.46; total, \$693,932.19. The operating expenses for the year were \$491,869.88; leaving net earnings, \$202,062.31.

The company reports itself free from debt, both bond and floating.

Stock of the Atlantic and Pacific Railroad Company to the amount of \$19,760,300 has been subscribed and paid. The receipts from transportation of passengers for the year ending June 30, 1876, were \$338,674.06; of freight, \$1,006,506.32; total, \$1,345,180.38.

The operating expenses for said year were \$719,614.52, leaving net earnings \$625,565.86. The entire cost of the road and fixtures has been \$37,368,789.64. The total indebtedness of the company is \$17,348,400.

On the 9th February last you accepted twenty miles of the road constructed by the California and Oregon Railroad Company, (now by consolidation part of the Central Pacific Railroad Company of California,) extending from near Vina to near Red Bluff, Cal.

On the 23d June last I accepted a section of the Oregon Central Railroad, extending from the 20th mile-post to the Yamhill River, a distance of 27½ miles.

Stock of the Texas and Pacific Railway Company to the amount of \$50,000,000 is authorized by law, of which \$6,073,000 has been issued. The receipts for the year ending June 30, 1876, were, from transportation of passengers, \$402,518.65; of freight, \$1,137,900.17; from express service, \$12,592.99; mail, \$30,794.74; telegraph, \$8,491.11; total, \$1,595,156.10. The expenses for said year were, for conducting transportation, \$308,011.33; motive-power, \$231,015.18; maintenance of way, \$219,085.65; maintenance of cars, \$91,259.11; general expenses, \$45,323.17; total, \$894,694.44; leaving net earnings, \$700,461.66. The entire indebtedness of the company is \$18,127,427.81.

Denver Pacific Railroad stock to the amount of \$4,000,000 has been subscribed and paid, being the total amount authorized by law. The receipts for the year ending June 30, 1876, were, from transportation of passengers, \$167,812.78; of freight, \$139,343.98; miscellaneous earnings, \$6,392.99; total, \$313,549.75. Expenses for said year were \$129,848.87, leaving net earnings, \$183,700.88. The cost of construction and equipment of the road has been \$6,495,350. The indebtedness of the company is \$2,524,091.73.

PATENT-OFFICE.

The work of the Patent-Office shows a gratifying increase in receipts and a decrease in expenditures, with a slight increase in the amount of labor performed.

From October 1, 1875, to September 30, 1876, the total receipts from all sources were \$787,586.75, an increase over the previous year of \$55,300.88. During the same period the expenditures were \$661,637.76, or \$47,236.59 less than those for the previous year. The number of applications for patents was 22,408, an increase over the former year of 919. The number of patents issued, including re-issues and designs, was 15,911, an increase over former year of 1,681. During the year two applications were filed for the extension of patents, and two were extended; 2,943 caveats were filed; 3,613 patents were allowed but not issued because of failure to pay the final fee; 1,037 applications were received for registration of trade-marks, and 1,029 trade-marks were registered; 644 applications were filed for registering of labels, and 499 labels were registered.

The work performed by the Patent-Office is highly satisfactory, and is due largely to the excellent clerical force employed, and to the fidelity of those officials charged with the supervision of its responsible duties.

As the Commissioner of Patents is required to make an annual report to Congress of the operations of his office, the brief abstract of the work of the year as above presented is deemed sufficient in this connection to show the condition of this important branch of the service.

PENSIONS.

The pension-roll has been diminished during the year by a greater number than during any year since 1873, when the maximum was reached; the number of pensioners on the 30th of June, 1875, being 2,684 more than at the close of the last fiscal year. The number of invalid pensioners on the 30th of June, 1876, was greater by 2,919 than at the close of the same month in the preceding year, while the roll of widows, dependent relatives, and survivors and widows of those who served in the war of 1812, contained 5,603 names less than it did on the 30th of June, 1875. In consequence of the large number of minors' pensions that will expire, and from other causes, it is anticipated that during the present year a still greater diminution will occur in this class of pensioners, while, on the other hand, it is reasonable to expect that the number of invalid claims allowed will exceed the number disposed of during any year since 1871. This presumption arises from the fact that the number of invalid claims filed during the last fiscal year far exceeds that of any year since 1866.

The whole number of names borne upon the pension-roll on the 30th of June, 1876, was 232,137. Of this number, 110,033 were pensioned as invalids, and 102,911 as widows and dependent relatives; 19,193 were pensioners of the war of 1812, 14,206 of whom were survivors, and 4,987 widows. There remained on the roll 6 widows of those who

served in the war of the Revolution who were married prior to January 1, 1800, and 314 who married subsequent to that date.

During the last fiscal year the following amounts were paid for pensions: To Army invalids, \$11,864,031.69; to Army widows, &c., \$14,456,286.76; to Navy invalids, \$182,788.96; to Navy widows, &c., \$313,682.15; to survivors of the war of 1812, \$1,089,037.18; to widows of those who served in said war, \$445,772.95; making a total amount of \$28,351,599.69, which includes cost of disbursement, and is \$1,331,516.94 less than was expended for the same purpose during the preceding year.

There were examined and allowed during the year ending June 30, 1876, 16,880 Army pension-claims, of which 5,225 were for invalid pensions, 6,828 for increased pension to invalids, 4,292 for pension to widows, dependent relatives, &c., 535 for increased pension to widows, &c.; 330 Navy pension claims, of which 135 were for pension to invalids, 81 for increased pension to invalids, 84 for pension to widows, 30 for increased pension to widows, and 241 claims for survivors and widows of those who served in the war of 1812, 73 of which were for pensions to survivors, and 168 to widows; making in all 17,451 claims which were examined and admitted during the year.

The annual charge to the Government involved by the allowance of said claims is as follows: For Army invalids, \$324,407; increased pension to invalids, \$309,938; widows, &c., \$543,250; increased pension to widows, \$32,968; for Navy invalids, \$14,007; increased pension to invalids, \$6,330; widows, &c., \$16,222; increased pension to widows, \$2,576; and for survivors of the war of 1812, \$7,008; and widows of those who served in said war, \$16,128; making an aggregate annual rate of \$1,272,834, or \$846,335.07 less than the annual value of the claims admitted during the year ending June 30, 1875.

There were on file on the 30th of June last 88,973 unadjudicated pension claims, 54,190 of which were for invalid pension, 34,053 for pension to widows, &c., 341 of survivors of the war of 1812, and 389 of widows of those who served in said war. At the close of the year ending June 30, 1875, there were on file 71,569 unadjudicated pension claims, or 17,404 less than at the end of the last fiscal year. There were received during the year 42,877 claims for pension, while during the same time 17,451 claims were admitted and 10,132 rejected; making in all 27,583 claims disposed of, or about 64 per cent. of the number filed. The claims for invalid pensions filed during the year were about 50 per cent. greater in number than those filed during the preceding year, and exceeded largely the number received during any year since 1866. The office has been greatly embarrassed in its labors by the delay in obtaining answers to calls upon the Surgeon-General for the medical history of claimants during their military or naval service, without which it is impossible, with few exceptions, to properly adjudicate their claims. There are at present 13,000 unanswered calls upon the Surgeon-General for the hospital-record of claimants, and, in consequence of the paucity of clerks in

his office, this number is being constantly augmented instead of diminished.

During the year, 852 applications for bounty-land were received; 124 warrants were issued, aggregating 16,760 acres of land, which was 44,800 less than the number of acres issued for the preceding year; 35 applications were rejected, 98 of which were without title, and the remainder, 253, were denied on account of warrants having been previously issued for the same service.

The number of cases investigated by special agents of the office was 2,633, and the amount of money thereby saved to the Government was \$136,981.54, or over three times the cost of investigation. Twenty seven persons have been prosecuted for violations of the pension laws; 17 were convicted, 12 of whom are awaiting sentence; 6 were acquitted, and in 4 cases a *nolle prosequi* was entered. Forty cases are still in the hands of various United States attorneys, undisposed of and awaiting action.

It is estimated that the sum of \$28,533,000 will be necessary for the pension-service during the ensuing fiscal year.

In my last annual report I referred to the unsuitableness of the Seaton building for the use of the Pension Office, and to its insecurity as a place of deposit for the valuable records and files of the office. My immediate predecessor had embodied like views in his annual reports, and on several occasions the attention of Congress had been called to the necessity of making some provision for the better protection of the valuable papers belonging to the Pension Office and for the personal safety of those engaged in the public service.

Congress, at its last session, recognized the necessity of affording the security asked for, and authorized the Secretary of the Interior to procure a fire-proof building of suitable accommodations, provided the same could be rented for a sum not exceeding the amount appropriated for the rent of the buildings occupied by the Pension Office and Bureau of Education, to wit, \$14,000. It was further provided in the same act, August 15, 1876, that "the lease of the present buildings shall be continued if the said buildings shall be made fire-proof by the owners thereof, to the satisfaction of the said Secretary, within six months from the passage of this act, without disturbing the use of the said building."

Immediately after the passage of this act I requested the Commissioner of Pensions to have a thorough survey made of the buildings, to determine whether the conditions on which the lease was to be continued were possible, and to report the result to the Department. The Commissioner called in the services of a competent architect, and a thorough examination was made. The result of this examination, as embodied in a report made to me, was, that the buildings could be made fire-proof only by a complete rebuilding of the interior of the structures in question, including partition-walls, stairways, &c., and that this could not be done without disturbing the use of the buildings, and probably compelling their entire vacation.

With this knowledge before me, and with a sense of the responsibility resting upon me for the care and protection of life and public property, already too long imperiled, I caused a notice to be served upon the proprietors of the Seaton building of intention to vacate on 15th of September, 1876, and leased the substantial structure located on the corner of Twelfth street and Pennsylvania avenue, known as the Shepherd building, a building of superior accommodations, and fire-proof from the cellar to the roof. The rent to be paid is not in excess of the amount appropriated, \$14,000, and is designed to accommodate the Bureau of Education as soon as the lease of the building now occupied by that office can be legally terminated.

In making this change, I have endeavored to act in strict accordance with the law, and for the benefit, solely, of the public service.

In my last report I suggested a change in the present cumbersome system of medical examinations. The experience of the past year confirms the belief I then entertained, that a simplification of the system should be made so as to better protect the interests of the Government, and at the same time facilitate the prompt settlement of deserving claims.

The Commissioner of Pensions, in a supplemental report, has clearly indicated his views in relation to the necessity which exists for a departure from the present system, which requires the services of upward of 1,500 examining surgeons. The plan he proposes is, in brief, to divide the country into districts not exceeding sixty, giving to each a competent surgeon and an experienced clerk. Their duties would be to personally examine the claimants and their witnesses, and transmit the result to the Pension-Office, and thus do away with much of the *ex parte* testimony, which, under the present system, involves the necessity of extended and uncertain correspondence.

The Commissioner believes that under the plan proposed the clerical force of his office could be largely reduced, and the necessity for special agents obviated, and estimates that the cost to the Government would be less than at present, aside from the security which the system would afford against the payment of fraudulent claims.

The magnitude of the interests involved renders the subject one of great importance, and I earnestly commend the views of the Commissioner to the attention of Congress as worthy of special consideration.

EDUCATION.

The report of the Commissioner of Education for 1876 contains the abstract of the reports of the several State and city superintendents and other official educational publications, showing for each State and Territory the school-population and the enrollment and attendance in the public schools, the number of teachers in the schools, with rate of compensation, the public-school income and expenditure, and the constitutional and legislative provisions in each State touching public instruction, with more or less full information for each State respecting

kindergarten and other private schools; also, detailed statements for each State respecting instruction in normal schools, academies, high schools, collegiate preparatory schools, business-colleges, colleges for women, scientific and agricultural schools, colleges and universities, schools of theology, law, and medicine, institutions for the deaf and dumb and blind, and other special schools, together with unusually complete tables of statistics of schools of all classes, compiled from replies to especial inquiries addressed by the Commissioner to the several States and city superintendents and to educational institutions throughout the country.

Much interesting information is also given respecting the history of the administration of education, besides a detailed account of the educational exhibits made by several of the States and by foreign governments at the Centennial International Exhibition. An increased interest in all that pertains to the history and present condition of education in this country has everywhere been awakened by the centennial commemoration, and calls upon the office for educational information have been greater than at any former period, especially from foreign officials and those authorized by foreign governments to make reports upon education in the United States.

In the regular discharge of its duties, the office has sent out some 7,500 reports and 33,000 pamphlets, published by it.

The labors of the statistical division have been greatly increased during the year by assiduous efforts to present with greater fullness and accuracy the statistics of the several classes of institutions embraced in the report as well as by the numerous calls by investigators at home and abroad for statistical information respecting special classes of schools or special subjects of instruction. The inquiries sent out by the division during the year numbered more than 7,000, to most of which replies were returned. These have been carefully collated and the results tabulated for the annual report.

The Centennial brought a manifold tax upon the office. Inquirers turned to it from all quarters, asking how an educational exhibit could be made.

The office offered the only national agency for harmonizing the diverse plans of the various systems and institutions.

In the furtherance of this object, experts were employed on various subjects, and over 80,000 printed documents and letters were sent out, in addition to an extended correspondence.

The special report on public libraries in the United States, which was announced in my last report as in preparation, was completed in October last, and is now through the press. The report traces the history and development of the several classes of public and semi-public libraries in the country, and presents important contributions by prominent librarians and experts on the leading questions connected with library economy and management, besides detailed statistics of nearly 3,700 public libraries, containing, in the aggregate, 12,276,964 volumes.

Considerable space is given to an account of the libraries of the General Government and of the past and present relations of the General Government to the State, territorial, and other public libraries of the country, together with a statement of the aggregate Government expenditure for libraries and sundry publications from 1800 to 1874, and an historical outline of the laws and regulations respecting the distribution and exchange of public documents, copyrights, duties on imported books, &c.

Notwithstanding the liberal provisions of the Government in respect to furnishing its publications to public libraries, it appears that there is not at present in any public depository in the United States, not even at the National Library, a complete series of Government publications. It is hoped that the specific information presented in the report respecting the method of obtaining these important publications will lead to a more systematic collection and careful preservation of them by the leading libraries of the country.

It is proper to add that in the preparation of this report the office has received the cordial co-operation of librarians, college professors, officers of historical, scientific, and other learned societies, school officials, and others interested in enhancing the usefulness of existing libraries or in establishing these important means of education and culture in communities now destitute of them.

The other special reports, including that on drawing and art education, that on colleges, on medical instruction, academies, and the growth of text-books, and that on the illiteracy of the country as reported in the several censuses, have been pushed forward as fast as means will permit.

Several foreign governments are offering to the United States the articles composing their educational exhibits at Philadelphia for a National Educational Museum. The Commissioner hopes that it may be the occasion when this great desideratum in American education can be supplied.

In view of the embarrassed condition of large sections of the country, he earnestly renews his recommendations that some way be devised by the General Government to make available for immediate educational purposes at least a portion of the income from the sale of public lands, and the devotion of the remainder to the creation of a permanent educational fund.

CENSUS OFFICE.

During the past fiscal year the work of the Census Office has been confined to answering inquiries relating to the census of 1870 and those of previous years, and to the stating and restating, in some instances, of the accounts of the United States marshals and assistant marshals connected with the taking of the census, whose accounts have hitherto been unsettled or lost. This work, together with the preservation and classification of the material collected, has been satisfactorily performed by the chief clerk of the Census Office.

GEOLOGICAL AND GEOGRAPHICAL SURVEY.

FIRST DIVISION.

The United States Geological and Geographical Survey of the Territories, under the direction of Professor Hayden, during the brief season of 1876, continued its work in Colorado, completing the western and northwestern portions, including a considerable portion of Eastern Utah, embracing an area of about 10,000 square miles.

The areas of exploration were much farther from the base of supplies than heretofore, being located in the remote interior of the continent, and at times infested with roving bands of hostile Indians. On this account the difficulties were much increased, causing great loss of time in traveling to and from the fields of labor.

The survey the present season was divided into five parties, four of them for topographical and geological work, and a fifth for making collections in natural history.

The topographical as well as the geological structure of the areas surveyed the present season was of the highest interest. It has been called the plateau region, and all the drainage extends westward into the Colorado River, and the streams, with their numerous branches, have worn deep gorges or cañons into the crust of the earth four thousand feet or more in depth. Continuous sections of strata were thus exposed nearly a vertical mile in thickness, rendering the geology simple and expressive.

Six sheets of the physical atlas have now been completed in accordance with previous instructions from the Department of the Interior, and the engraving is nearly done, and that portion of the physical atlas embracing Colorado and parts of the adjacent Territories will be ready for distribution early in the spring. Each of the sheets embraces an area of over 11,500 square miles, with a total area of about 70,000 square miles. They are prepared on a scale of four miles to one inch, with contours of two hundred feet, and on these charts will be represented, by means of colors, the geological formations, as well as a great amount of valuable information of a practical character to the country in regard to the areas of grass, timber, and mineral lands, and all those portions susceptible of cultivation by means of irrigation. Much information was also secured in regard to the ancient ruins of Southern Colorado, New Mexico, and Utah, and large collections of minerals, fossils, and other specimens of natural history. None of the parties were disturbed by hostile Indians, and the results of the season's labor are very satisfactory.

SECOND DIVISION.

The work of the geographical and geological survey of the Rocky Mountain region, under the direction of Prof. J. W. Powell, during the past year, will, it is believed, show practical and important results.

On the arrival of the parties from the field late in the fall of 1875 work in the office was promptly organized and pushed with all possible vigor through the winter, spring, and early summer, until the appro-

priations for the fiscal year of 1876-'77 were available for the continuation of field operations. During the time thus indicated a "report on the geology of the Uinta Mountains and a region of country adjacent thereto" was completed, which was accompanied by an atlas, embracing a map of the district, exhibiting the local distribution of geological formations; another, showing, by appropriate colors, the distribution of irrigable lands, timber-lands, grass-lands, and mineral-lands, and four sheets devoted to the proper exhibit of the structural geology of the region.

In addition to this work, the necessary computations for the construction of the maps of the region previously surveyed were finished, the projections made, and the drawings completed ready for the engraver. In the mean time preliminary maps of the region were prepared and photolithographed.

After completing the report on the Uinta Mountains above mentioned, Professor Powell's time was chiefly occupied in the study of the ethnographic and linguistic materials collected in previous years.

As soon as the appropriations for 1876-'77 could be used the surveying corps took the field, and five parties were organized—one to continue the triangulation, two topographic parties, and two geological parties. These parties are still in the field. The region surveyed during the present season has been chiefly in the Territory of Utah, but a small part in the northern part of Arizona.

The Rocky Mountain region of the United States, (not including Alaska,) or that portion west of the meridian of $99^{\circ} 30'$, was by a former Secretary of the Interior divided into districts for surveying and mapping purposes, and these districts numbered; the area of each district is $2\frac{1}{2}$ degrees in longitude, and $1\frac{1}{2}$ degrees in latitude. The region of country surveyed by the parties under the direction of Professor Powell is embraced in districts numbered 75, 85, 86, 95, 96, 104, and 105; the first five lying directly west of the region in which Dr. Hayden is engaged, while districts 104 and 105 lie immediately south of the other districts in which he himself has been at work. During the earlier part of his work, before these districts were established by this Department, Professor Powell's work extended in an oblique direction from northeast to southwest along the general course of the Colorado River through the districts above designated, but the work was in such a condition that no one district was complete. During the present season his parties have been engaged in extending the survey over the unsurveyed fractional districts, so that final and complete maps of each may be constructed.

In addition to the determination of geodetic positions and general geographic features, the system of classifying the lands inaugurated in former years has been continued during the present; the object of this classification being to determine the extent and position of the irrigable lands, timber-lands, grass-lands, mineral-lands, and waste lands, the latter being composed of rugged mountains and desert plains.

In the region embraced in this survey a very small portion of the country can be redeemed by irrigation for agriculture, and no part of it can be cultivated without irrigation. It appears from the reports that less than one per cent. can thus be made available. Especial care has been given to the determination of the extent of such lands so as to exhibit their position on the maps.

Having in view economy and convenience in the linear surveys of this district, the geodetic points of the general geographic survey under the direction of Professor Powell have been carefully marked that they may hereafter be used as datum-points by the officers of the General Land-Office.

Extensive coal-fields exist in the region surveyed, but, as in many other parts of the world, these coal-fields are of practical value at comparatively few places. The general characteristics of these coal-fields have been the subject of much investigation, and some very interesting and valuable results have been reached. These will appear in the final reports. The quantity of available coal is practically inexhaustible, and the mines that can be economically worked are of great number.

In the Uinta Mountains silver and copper mines have been discovered and worked by private parties. The extent of these silver and copper bearing rocks has been determined, but their value can be established only by extensive working.

Under instructions from this Department, Professor Powell and his parties have also been engaged in general ethnographic work in the Rocky Mountain region. One of the special items in these instructions was the classification of the Indian tribes, such classification being not only of scientific interest but of importance in the administration of Indian affairs. For the eastern portion of the United States this work had been accomplished, first by the unofficial labors of Hon. Albert Gallatin, and subsequently continued by Hon. Henry R. Schoolcraft as an officer of the Government; and some additions had been made to this work by various persons for scientific purposes. This work has been renewed by Professor Powell, and has been pushed with all the energy possible with the funds at his command, and a large amount of material has been collected by himself and by members of his corps and by residents in and travelers through the country. In addition to this, a large amount has been collected by the Smithsonian Institution through various channels—materials as yet unpublished. The officers of that Institution have placed all this matter in the hands of Professor Powell, to be combined with his own collections. The first volume of the reports on this subject will soon be issued. It treats of the tribes of Alaska, the western half of Washington, and Northwestern Oregon, and is accompanied by maps exhibiting the geographic distribution of the tribes of these regions. A second volume, on the tribes of California, has also been sent to the Government Printer, which will be succeeded by others as rapidly as they can be prepared.

BENEVOLENT INSTITUTIONS.

ASYLUM FOR THE INSANE.

During the year ending June 30, 1876, 931 patients were under treatment in the Government Hospital for the Insane, being an increase over the previous year of 19. Of this number 84 were discharged recovered, 36 improved, 1 unimproved, and 66 died, making a total by discharge and death of 187. Of this number 142 were males and 45 females. The total number remaining in hospital June 30, 1876, was 744: 576 males and 168 females.

The number of patients admitted during the year ending June 30, 1876, was 213; 166 were males and 47 females; 81 were from the Army, 14 from the Navy, and 118 from civil life. There were 10 re-admissions and one transfer from the private to the indigent list during the year. Of the 744 patients under treatment on the 30th of June, 1876, 400 were from the Army, 49 from the Navy, and 295 from civil life.

The recoveries during the year were 70— per cent. of the discharges— 45 per cent. of the discharges and deaths together, 39+ per cent. of the admissions, and 9+ per cent. of the whole number under treatment. The death-rate of males was 67— ; of females, 84+ ; and the average of both sexes 79— in a thousand. The general health of the institution has been good, and no disease of a hospital or local origin has existed. Although the wards of the hospital are crowded beyond their intended limits, care has been taken to secure ample ventilation, and to this, together with good management in the treatment of patients, the satisfactory sanitary condition of the hospital may be attributed.

Since January, 1855, when the hospital was opened, to June 30, 1876, 4,104 cases have been treated. Of this number 83 were re-admissions, making the total number of persons treated 4,021.

The board of visitors report the resumption of chapel-services, which were temporarily suspended last year on account of repairs, and the introduction of more interesting and useful week-day evening-entertainments for the benefit of the household.

The whole number of pay-patients treated during the year was 54, 33 being males and 21 females. The number remaining June 30, 1876, was 29: 17 males and 12 females.

The wholesale market-value of the products of the farm and garden during the season of 1875, as estimated by a practical gardener and dairy-man, was \$23,502.82. The hay, corn, rye, mangel-wurzel, grass, and other forage-crops, amounting to \$6,750.50 in estimated market-value, are not included in valuing the products of the year, having been credited to the farm in milk, meats, and the keeping of horses for hospital uses.

The estimated value of the live stock, farm and garden implements, and other personal property of the hospital used mostly for agricultural purposes on the 30th of June, 1876, was \$20,003.84.

The expenditures for the support of the hospital, including needful repairs and improvements, amounted to \$167,773.42. The receipts during the year were:

From Treasurer of the United States	\$150,171 00
From private patients for board, &c	11,348 45
From sundry receipts, including sale of pigs, hides, rags, &c	6,257 76
	<hr/>
	167,777 21

Of the \$23,748 appropriated at the second session of the Forty-third Congress for general repairs and improvements all but \$3,960 have been expended as originally designed. This latter sum, intended for bringing the water across the river, was found to be insufficient for the purchase and laying of pipe of proper size, and was therefore not drawn from the Treasury. In addition to the reservoir, pump-house, and other improvements connected with the water-supply, an extensive filter has been constructed and the pumping-reservoir filled from the river. The board of visitors, in their report, in referring to these improvements, say:

The institution possesses, in duplicate, the most substantial, durable, and reliable facilities for raising to the tanks in the attics of the main edifice an ample supply of pure water, that is essential to the economies, health, and safety of every hour of hospital life.

The board of visitors submit the following estimates for the year ending June 30, 1877:

For the support, clothing, and medical and moral treatment of the insane of the Army and Navy, Marine Corps, and Revenue-Cutter Service, and of all persons who have become insane since their entrance into the military or naval service of the United States, and who are indigents, and of the indigent insane of the District of Columbia, in the Government Hospital for the Insane, one hundred and sixty thousand four hundred and twenty-six dollars, (\$160,426.) This estimate is based upon the support of 710 non-paying patients, or an estimated average cost per week of each patient of \$4.33 $\frac{1}{4}$.

If the requirements of the last appropriation act, that "one-half of the expense of the indigent persons who may be hereafter admitted from the District of Columbia shall be paid from the treasury of said District," shall be continued, it is estimated that at least \$5,843 will be derived from this source, leaving the amount necessary to be appropriated by Congress \$154,583.

For enlarging and improving the gas-works, slaughter-house, drainage, and laundry of the hospital, and for the erection, furnishing, and fitting up of an enlarged and improved bake-house and oven, including store-room for flour and lodging for bakers, fifteen thousand dollars, (\$15,000.)

For general repairs and improvements, ten thousand dollars, (\$10,000.)

For the erection and fitting up of a separate building for the accommodation and treatment of female patients, three hundred and ninety-five thousand dollars, (\$395,000,) one-half of which is asked for expenditure in the year 1877-'78.

The board of visitors earnestly represent the necessity of these additional facilities.

In view of the fact that the present building and apparatus for providing meats, bread, washing, and baking were designed for an institution accommodating 350 patients and the requisite number of officers and employés for that number, it would appear necessary that greater accommodation should be provided for the present force, which is nearly double that for which provision was made. I therefore recommend the improvements suggested by the board as worthy the favorable consideration of Congress.

In my last report I favored the recommendations of the board of visitors in relation to the erection of a separate building for the care and treatment of female patients. Aside from the propriety of separating the sexes, so as to allow greater freedom to each, the overcrowded condition of the present building renders additional accommodations necessary, and as the proposed extension is urgently recommended by the board of visitors and superintendent, not only for the proper accommodation of the patients, but for the better treatment of both sexes, I renew my former recommendation, and ask for the proposed improvement the favorable consideration of Congress.

There has been no change in the resident officers in the course of the year. They have been diligent and faithful in the discharge of their delicate and responsible duties. As a rule, the attendants have been kind to the patients and have performed their duties in a satisfactory manner. The general management of the institution has been good, and its results commend it to the continued confidence and support of the Government.

DEAF AND DUMB ASYLUM.

During the year ending June 30, 1876, 100 pupils—85 males and 15 females—received instruction in the Columbia Institution for the Deaf and Dumb. Of this number 53 were in the collegiate and 47 in the primary department.

The general health of the institution has been good, only one death having occurred during the year.

The receipts during the year, including a balance of \$3,991.81 on hand at the beginning of the year, were \$56,813.76, and the disbursements \$54,676.75, leaving an unexpended balance of \$2,137.01.

For the extension and fitting up of buildings during the year ending June 30, 1876, the sum of \$40,070.96 has been expended.

The estimates submitted for the next fiscal year are as follows: For the support of the institution, including salaries and incidental expenses, and \$500 for books and illustrative apparatus, \$51,000.

For the completion of the work on the erection, furnishing, and fitting up of the buildings of the institution in accordance with plans herefore submitted to Congress, \$69,524.62.

For the inclosure, improvement, and care of the grounds of the institution, \$10,000.

The board of directors present in their report certain valuable suggestions in relation to the higher education of the deaf and dumb of the several States, and the propriety of inviting the States to make provisions for the support of students here. Under its present management the institution has demonstrated the feasibility of imparting a collegiate education to certain of the deaf and dumb of the country, and this should encourage the belief that a greater degree of usefulness would be attainable if the facilities afforded were enjoyed by the more proficient among the deaf and dumb of the several States who are now shut out because of the inability on the part of the institution to support them. The board suggests that the subject of State support to worthy students be brought to the attention of the governors of the several States in some formal manner, so that the necessary steps may be taken to secure the requisite legislation.

FREEDMEN'S HOSPITAL.

During the year ending June 30, 1876, 596 persons were treated in Freedmen's Hospital, of which number 331 were admitted during the year; of this number 203 were males and 113 females. During the year 7 males were born in the hospital and 18 females. Of the total number of patients, 214 were discharged as cured, 30 as relieved, and 89 died; total discharged and died, 333. Remaining in hospital June 30, 1876, 263.

In the dispensary attached to the hospital 1,466 patients have been prescribed for and furnished with medicine.

The orphan asylum, containing about 110 children and attendants, has been furnished with medicines and medical attendance during the year, and subsistence has been furnished to 25 of these orphans.

COLUMBIA HOSPITAL FOR WOMEN.

During the year ending June 30, 1876, 330 patients were under treatment in the Columbia Hospital for Women and Lying-in Asylum; 222 were admitted during the year. There were 80 births during the same time. There were 131 cases cured; 59 relieved; 2 died; 18 incurable; 5 sent to other institutions, and 21 cases the results of which are unknown.

The character of cases treated and the nature of operations performed embrace all the variety of diseases to which women are peculiarly liable, and for the treatment of which this institution was established.

The general health of the hospital has been remarkably good, not a single death occurring among the patients admitted during the year.

The two deaths reported were cases admitted during the preceding year. These pleasing results are due to the excellent management of the institution and the wise sanitary measures adopted.

PROVIDENCE HOSPITAL.

Congress having appropriated \$15,000, or so much thereof as might be necessary, for "the care, support, and medical treatment of 75 transient paupers, medical and surgical patients, in some proper medical institution in the city of Washington or in the District of Columbia, under a contract to be formed with such institution, a contract for this purpose was entered into with the sister superior of Providence Hospital for the year ending June 30, 1876.

On the 1st of July, 1875, 117 patients, admitted under a previous contract, remained in the hospital. During the year 561 patients were admitted, of which number 449 were males and 112 females. During the year 539 were discharged and 49 died. The total number treated was 678; 538 being males and 140 females. The number remaining in the hospital July 1, 1876, was 90; 69 males and 21 females.

Under act of Congress, approved July 31, 1876, like provisions were made for the medical treatment of transient paupers in Providence Hospital, and the direction of the same transferred to the Surgeon-General of the Army.

CAPITOL EXTENSION.

The architect reports that the Capitol Building has been kept in good repair, and many improvements made to it during the past year. These improvements have been of a substantial character, and include important changes in the method of introducing fresh air in the halls of legislation.

He also reports that the vases, the large lamps, and the balustrades at the eastern grounds have been completed, and that the western grounds are now being improved by planting and by paving roadways and foot-walks. He recommends sufficient appropriation to complete the paving of the various roadways, foot-walks, and for the completion of the fountains. The fire engine-house, the construction of which was authorized by the act approved June 23, 1874, has been completed, and is now being used by the District government.

THE NEW JAIL.

In the early part of December, 1875, the new jail was so far completed as to admit of its occupation by prisoners. Since that time the entire building, with a few minor exceptions, has been completed. The Supervising Architect reports the heating, laundry, and kitchen apparatus in excellent working condition. The sewer has been extended to the river, much of the work necessary for the purpose having been performed by the prisoners, under the supervision of the warden.

The architect estimates the following as necessary to complete the

building and its surroundings: Finishing inside of cupola and painting ceiling over guard-room, \$1,500; coal-vaults, \$5,000; stable and straw-house, \$3,000; four hand-power elevators, \$2,000; inclosing wall, (about 1,900 feet,) \$60,000.

The estimate contemplates the employment of prison-labor wherever possible.

The architect, in closing his report to the jail commissioners, says: "The character of the work is excellent, and the building being well adapted for a penitentiary as well as a jail, I would call attention to the suggestion contained in the Supervising Architect's report for 1873, and if authority is obtained from Congress for converting it into a penitentiary, an appropriation should be asked for erecting the necessary work-shops."

THE CENTENNIAL EXHIBIT.

The Department, through its several bureaus and offices, has been well represented at the International Exposition held at Philadelphia, Pa. The collections furnished by the Patent, Land, Indian, Educational, and Census Offices, together with the offerings of the Geological Surveys under Messrs. Hayden and Powell, attracted marked attention among the Government exhibits, and in their arrangement and selection reflected credit on those having them in charge. The general management of the Department display was under the direction of Commissioner John Eaton, jr., appointed by the President to represent the Department at the Centennial, and to his efforts, characterized by energy and fidelity, the success of the Interior exhibit is largely due.

PUBLIC DOCUMENTS.

There were received at the Department for distribution during the fiscal year ending June 30, 1876, twenty-eight thousand eight hundred and seventy-four bound volumes and seventeen thousand two hundred and eighty-five pamphlets.

I am persuaded that the laws relating to the publication and distribution of public documents should be carefully revised and simplified.

In my judgment, provision should be made for supplying gratuitously all the important public libraries of the country with copies of every valuable publication issued by the Government, while individuals should be required to pay cost-price for the same, exception being made of persons in official position, who should be provided with such documents as are essential to the proper discharge of the duties of their office.

The custody and distribution of such documents should be confined to a single agency, so that there might be one source from which the publications of the Government, or accurate information concerning them, could readily be obtained.

I am, sir, very respectfully, your obedient servant,

Z. CHANDLER,
Secretary of the Interior.

The PRESIDENT.

ANNUAL REPORT

OF THE

SECRETARY OF THE INTERIOR

ON THE

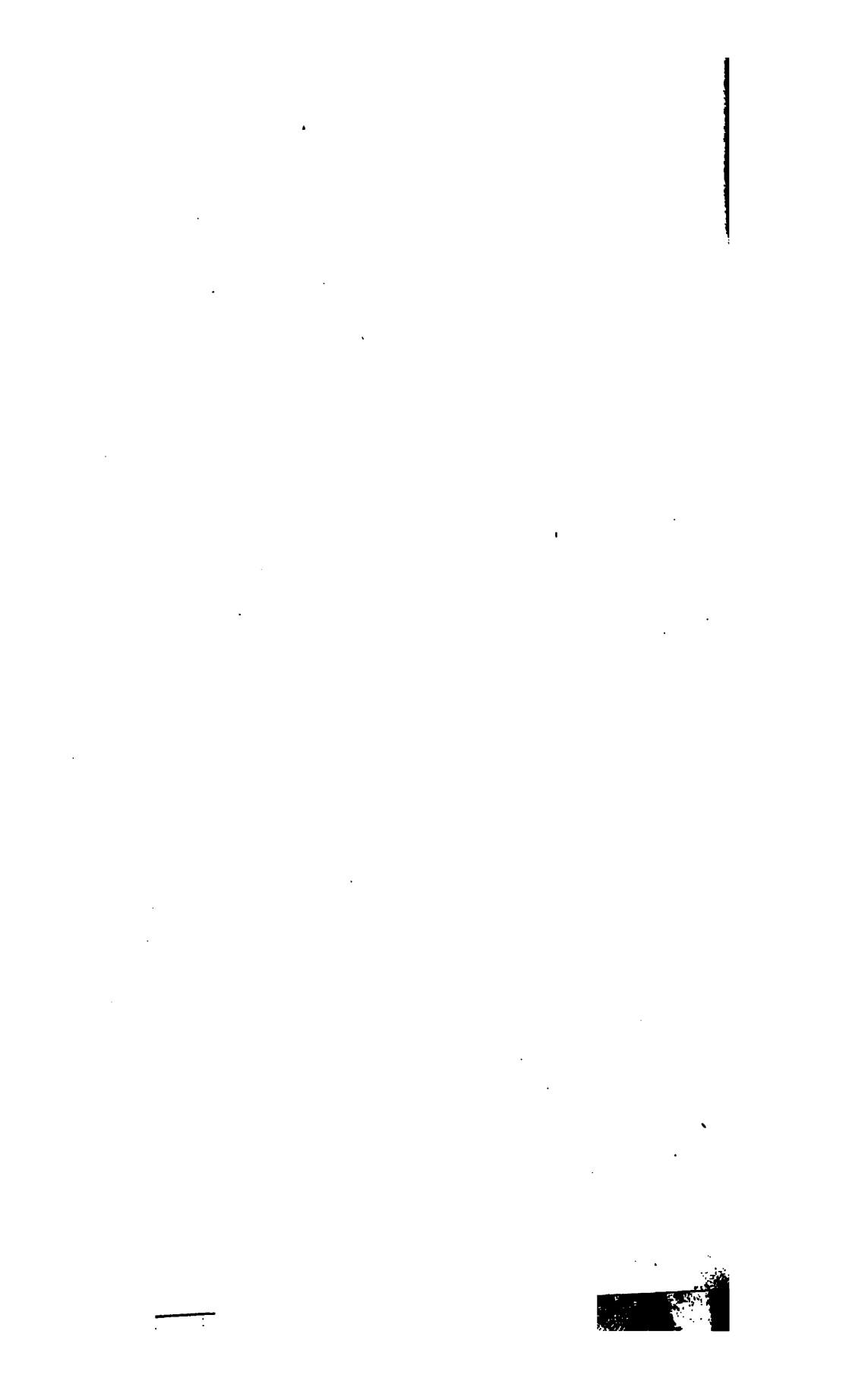
OPERATIONS OF THE DEPARTMENT,

FOR THE

FISCAL YEAR ENDED JUNE 30, 1877.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1877.



R E P O R T
O F
THE SECRETARY OF THE INTERIOR.

DEPARTMENT OF THE INTERIOR,
Washington, November 1, 1877.

SIR: I have the honor to submit the following summary of the operations of this department during the past year, together with such suggestions as seem to me worthy of consideration:

INDIAN AFFAIRS.

The report of the Commissioner of Indian Affairs, which I herewith present, contains an elaborate statement of the transactions of the branch of the public service under his supervision, as well as valuable suggestions concerning the policy to be pursued.

THE SIOUX.

The year opened with a Sioux war, which resulted in the surrender of numerous and important hostile bands, while some of them under the leadership of Sitting Bull sought refuge on British territory. The Ogalalla and Brûlé Sioux have recently been removed from the Spotted Tail and Red Cloud agencies in Nebraska, and are at present on their way to the vicinity of the Missouri River, in accordance with the provisions made by Congress to that end, and with what was believed to be an agreement with the Sioux themselves, well understood on both sides. The Sioux, however, were reluctant to carry out that understanding, and it was considered unsafe to attempt the movement while the Nez Percé war was going on and the apparent successes of Chief Joseph might have encouraged a spirit of resistance among the more warlike tribes. Thus the removal was delayed, and it was deemed prudent to permit a delegation of Sioux chiefs to visit Washington for the purpose of laying their grievances and wishes before the President in person. The result of the council held here was in so far satisfactory, as the Sioux chiefs, after having rejoined their tribes, used their influence, apparently with success, in silencing all opposition to the removal. The wish expressed by the chiefs to be located on White River, in Dakota, will be complied with as soon as the season permits it, and liberal provision should be made to aid them in engaging in agricultural pursuits and the promotion of a higher order of civilization among them. The removal was undertaken

after consultation with General Crook, who in a high degree possesses the confidence and affection of these Indians, and it is to be hoped the difficulties of so long a march in an unfavorable season will be successfully overcome.

SITTING BULL.

The presence of the Sioux chief, Sitting Bull, with a large number of followers, on British soil in the immediate vicinity of our northern frontier, threatened to become a constant source of disquietude on the border, and was, therefore, a matter of grave concern both to this government and that of the Dominion of Canada. Early in August last a member of the Canadian Government visited Washington, and at his suggestion, and upon consultation with him, two commissioners, General A. H. Terry, U. S. A., and A. G. Lawrence, esq., were sent to the encampment of Sitting Bull, with the following instructions, dated September 6, 1877:

The President desires you to proceed at your earliest convenience to Fort Benton, and thence to a point on our northern frontier from which the present encampment of the Sioux chief, Sitting Bull, on British territory, is most easily accessible. At the frontier you will be met by a detachment of mounted Canadian police, detailed by the Government of the Dominion of Canada for your protection.

It is the object of your mission, undertaken at the suggestion of the Government of the Dominion, to ascertain what danger there may be of hostile incursions on the part of Sitting Bull and the bands under his command upon the territory of the United States, and, if possible, to effect such arrangements, not unacceptable to the Government of the Dominion, as may be best calculated to avert that danger. To this end you will put yourself in communication with Sitting Bull in such manner as under existing circumstances may seem to you most judicious. In doing so, you will keep the following facts in view: In the month of February last Sitting Bull and his band engaged in armed hostilities against the United States, and, pursued by our military forces, crossed the boundary-line of the British Possessions for the purpose of escaping from that pursuit. At that time the fugitive Indians appeared to be well armed, but their ammunition was so nearly exhausted that they were no longer able to continue the struggle. Under such circumstances they took refuge on British soil, where the troops of the United States could not follow them without violating the territory of a friendly power. It is reported, and there is good reason for believing, that these hostile Indians have availed themselves of the protection and security thus enjoyed to replenish their stock of ammunition, and thus to enable themselves to resume their hostilities against the United States as soon as they may find it convenient to do so.

According to all recognized principles of international law, every government is bound to protect the territory of a neighboring friendly state against acts of armed hostility on the part of refugees who, for their protection from pursuit, have crossed the frontier. While the Government of Great Britain will be most mindful of this obligation, the President recognizes the difficulties which, in dealing with a savage population, may attend its fulfillment, and he is therefore willing to do all in his power to prevent any interruptions of the relations of good neighborhood and to avert a disturbance of the peace of the border, even to the extent of entering into communication with an Indian chief who occupies the position of a fugitive enemy and criminal.

You are therefore instructed, in the name of the President, to inform Sitting Bull and the other chiefs of the bands of Indians recently escaped into the British Possessions, that they will be permitted peaceably to return to the United States and occupy such reservations as may be assigned to them, and that they will be treated in a friendly spirit as were other hostile Indians who, after having been engaged with

Sitting Bull and his followers in hostilities against the United States, surrendered to our military forces. This treatment, however, can be accorded only on condition that Sitting Bull and all the members of the Indian bands who take advantage of this offer of pardon and protection, when crossing the line from British territory to that of the United States, surrender to our military forces stationed at the frontier all their firearms and ammunition, as well as all their horses and ponies, the military commander permitting them the temporary use of such animals as may be necessary for the transportation of the aged and infirm among the Indians who may be unable to march on foot to the reservations. You will insist upon this condition to its full extent, and not make any promises beyond that of a pardon for the acts of hostility committed as stated above.

Should Sitting Bull and the other chiefs with him express their willingness to return to the United States on these terms, you will notify the commander of the United States forces at _____ of that fact, and instructions will be given for the reception of the Indians at the frontier. In case the Indians refuse to return to the United States upon such terms, you will then break off all communication with them, and the Government of Great Britain will no doubt take such measures as may be necessary to protect the territory of the United States against all hostile invasion.

The commissioners met Sitting Bull and other Sioux chiefs at Fort Walsh, on British territory, and communicated to them the conditions on which their return to the United States would be permitted. The Sioux chiefs refused to accept the terms offered, and declared their determination to remain on British soil, whereupon the commissioners, in pursuance of their instructions, withdrew. Immediately after their withdrawal the Canadian authorities had a conference with the same Sioux chiefs, the results of which were communicated to the commissioners by Colonel McLeod, commanding the Mounted Police, as follows:

In answer to your note I beg leave to inform you that after the interview of the commissioners with the Indians I had a talk with the latter. I endeavored to impress upon them the importance of the answer they had just made; that although some of the speakers to the commissioners had claimed to be British Indians, we denied the claim, and that the Queen's Government looked upon them all as American Indians, who had taken refuge in our country from their enemies. I pointed out to them that their only hope was the buffalo; that it would not be many years before that source of supply would cease, and that they could expect nothing whatever from the Queen's Government as long as they behaved themselves. I warned them that their decision not only affected themselves but their children, and that they should think well over it before it was too late. I told them that they must not cross the line with a hostile intent; that if they did they would not only have the Americans for their enemies, but also the police and the British Government, and urged upon them to carry my words to their camps, to tell all their young men what I had said, and warn them of the consequences of disobedience, pointing out to them that a few indiscreet young warriors might involve them all in most serious trouble. They unanimously adhered to the answer they had given the commissioners, and promised to observe what I had told them. I do not think there need be the least anxiety about any of these Indians crossing the line, at any rate not for some time to come.

The object of the commission, "to effect such arrangements as may be best calculated to avert the danger of hostile incursions on the part of Sitting Bull, and the bands under his command, upon the territory of the United States," and to secure the peace of the border, has, therefore, been

successfully accomplished. While Sitting Bull and the other Sioux chiefs with him, in spite of the unusual effort made by this government, refused to place themselves under the control of the United States, the Canadian authorities have not failed to recognize the friendly spirit which prompted, on our part, so extraordinary a step as the opening of communication with a fugitive enemy on foreign soil in order to prevent any interruption of the relations of good neighborhood, and have, with the most commendable promptness, taken such measures as a high sense of their international obligations suggested. Unofficial information has reached us that Sitting Bull and his bands have been removed to a place more distant from the frontier, and it is expected that the Canadian authorities will be entirely successful in preventing hostile incursions upon the territory of the United States, on the part of these Indians.

THE NEZ PERCÉS.

The report of the Commissioner of Indian Affairs contains an elaborate statement of the origin, progress, and termination of the Nez Percés war. There seems to be little reason to doubt that this bloody conflict might have been avoided by a more careful regard for the rights of an Indian tribe, whose former conduct had been uniformly peaceable and friendly. The outbreak of hostilities was marked by a number of murders and barbarous outrages on the part of the Indians; but the subsequent conduct of the struggle has become memorable by the extraordinary skill and energy displayed by Chief Joseph, as well as by an almost entire absence of those acts of savage cruelty which ordinarily render Indian warfare so horrible. If any of the perpetrators of the above-mentioned murders have survived, they ought to receive the punishment due to their crimes. It seems at least doubtful whether Chief Joseph can be charged with any responsibility for those atrocities, all of which are reported to have occurred in his absence. His general conduct certainly entitles him to the fullest benefit of the doubt, and to that consideration which is usually accorded to a prisoner of war after an honorable surrender. The captive Nez Percés were, immediately after the termination of the war, moved eastward by the military authorities, and will be held, as long as may be necessary, at a point within easy reach of supplies. The feeling excited among the settlers by the outrages committed at the outbreak of hostilities renders the return of the captives to their old reservation unadvisable. I recommend their settlement in the Indian Territory as soon as circumstances will permit. The defeat of Chief Joseph has undoubtedly had the effect of greatly discouraging the spirit of restlessness, which, during the summer, appeared among other Indian tribes, and of thus lessening the danger of further disturbance.

THE APACHES AND WARM SPRING INDIANS.

After the removal, in June, 1876, of 325 Chiricahua Apaches to San Carlos, the Chiricahua reserve was abolished, and the military com-

mander of Arizona requested to treat as hostile all Indians found in that locality.

Raids by the renegades became frequent; many lives were taken, much property stolen or destroyed, and by February, 1877, the old reign of terror seemed to have returned to the southeastern portion of Arizona.

In March last it was definitely ascertained that not only were the renegades re-enforced by Indians from the Hot Springs reserve, in New Mexico, but also that that reserve was being used as a harbor of refuge for the outlaws. Accordingly, Agent Clum, under instructions from this office, proceeded with 103 San Carlos Indian police to the Hot Springs reserve, and, with the vigorous co-operation of the military commander of New Mexico, succeeded in removing, on the 1st of May, to the San Carlos reservation, 453 disarmed and dismounted Indians who were located on the Gila River.

All other Indians who had belonged to the Hot Springs agency were declared renegades, and the reserve was restored to the public domain.

Although active scouting for renegades was carried on in Southeast Arizona and Southwest New Mexico, raiding to a greater or less extent did not cease throughout the summer.

On the 2d of September a majority of the Hot Springs Indians and a portion of the Chiricahuas, numbering in all about 300, suddenly left the San Carlos reserve and struck a settlement in New Mexico, killing 8 persons and stealing some horses. In two engagements with the San Carlos police, 12 of the fugitives were killed and 43 captured. All available troops in that Territory were promptly put into the field against them, and on the 13th of last month 3 chiefs with 187 Apaches surrendered at Fort Wingate, finding themselves unable to successfully carry on war in a country thoroughly occupied by United States soldiers and Indian scouts. These, with 51 who have since surrendered, have been taken to the old Hot Springs reservation, where their final disposition will be decided upon.

THE PONCAS.

Congress at its last session made provision for the removal of the Poncas from their former reservation on the Missouri River to the Indian Territory, resolved upon for the reason that it seemed desirable to get them out of the way of the much more numerous and powerful Sioux, with whom their relations were unfriendly. That removal was accordingly commenced in the early summer. The opposition it met with among the Poncas themselves and the hardships encountered on the march are set forth at length in the report of the Commissioner of Indian Affairs. The Poncas, about 700 in number, were taken to the Quapaw reservation, in the northeastern corner of the Indian Territory, with a view to permanent settlement. But the reluctance with which they had left their old homes, the strange aspect of a new country, an unusually large number of cases of disease and death among them, and

the fact that they were greatly annoyed by white adventurers hovering around the reservation, who stole many of their cattle and ponies and smuggled whisky into their encampments, engendered among them a spirit of discontent which threatened to become unmanageable. They urgently asked for permission to send a delegation of chiefs to Washington to bring their complaints in person before the President, and it was reported by their agent that unless this request be granted there was great danger that they would run away to their old reserve on the Missouri River. To avoid such trouble, the permission asked for was given, and the delegation arrived here on November 7. They expressed the desire to be taken back to their old reservation on the Missouri, a request which could not be acceded to. But permission was granted them to select for themselves, among the lands at the disposal of the government in the Indian Territory, a tract at least equal in size to their old reservation, and they also received the assurance that they would be fully compensated in kind for the log-houses, furniture, and agricultural implements which, in obedience to the behests of the government, they had left behind on the Missouri.

The case of the Poncas seems entitled to especial consideration at the hands of Congress. They have always been friendly to the whites. It is said, and as far as I have been able to learn, truthfully, that no Ponca ever killed a white man. The orders of the government always met with obedient compliance at their hands. Their removal from their old homes on the Missouri River was to them a great hardship. They had been born and raised there. They had houses there in which they lived according to their ideas of comfort. Many of them had engaged in agriculture, and possessed cattle and agricultural implements. They were very reluctant to leave all this, but when Congress had resolved upon their removal, they finally overcame that reluctance and obeyed. Considering their constant good conduct, their obedient spirit, and the sacrifices they have made, they are certainly entitled to more than ordinary care at the hands of the government, and I urgently recommend that liberal provision be made to aid them in their new settlement.

INDIAN POLICY.

While thus some progress has been made in the adjustment of difficulties and the danger of disturbance on a large scale seems remote, it would be unwise to lose sight of the lesson taught by experience, that in these things appearances are sometimes deceptive, and that the general condition of our Indian affairs is by no means satisfactory. It is useless to disguise the fact that a perfect solution of the "Indian problem," that is to say, so complete an absorption of the Indians in our social and political system that they no longer appear as an incongruous and troublesome element, is, in our days at least, fraught with perplexities which cannot be solved by a mere stroke of legislation. We have to deal with a population whose character and habits of life are

such as to present extraordinary difficulties to civilizing influences. This circumstance alone, however, does not in itself constitute the main difficulty we have to contend with. We are frequently reminded of the fact that the character of our Indians does not materially differ from that of the Indians in the British possessions on this continent, and that nevertheless peace and friendly relations are maintained there between the Indians and the whites. That is true. But the condition of things in the British possessions is in some very important respects essentially different from that which exists in the United States. In the British possessions the bulk of the Indian population occupy an immense area almost untouched by settlements of whites. On that area the Indians may roam about in full freedom, without danger of collision, and the abundance of fish and game furnishes them comparatively ample sustenance. The line dividing the Indians and the whites can be easily controlled by a well-organized body of police, who maintain peace and order. But in the United States we have no longer a dividing line. The "Indian frontier" has virtually disappeared. Our Indian population is scattered over a vast extent of country into which the agricultural settlers, as well as the adventurous element of our people in quest of rapid gain have pushed their skirmishers in all possible directions. Wherever in the far West the enterprise of the whites advances, whites and Indians come into immediate contact and are "in one another's way." That contact is apt to bring on collisions, especially as the more reckless element of the whites, which abounds in that part of the country, holds the rights and lives of Indians in very light estimation, and can, in many localities at least, scarcely be said to be under the control of law, while in frequent instances also the Indian provokes retribution by following, without restraint, his savage propensities.

There are still other complications aggravating this condition of things. The early colonists on this continent saw in the Indian tribes surrounding them a very formidable power, and naturally entered with them into formal treaty relations. That system has come by inheritance down to our days, when the Indians, under a radical change of circumstances, appear at the same time as "independent tribes," as "national wards," and as subjects. It is needless to recount the history of Indian treaties. As white settlements rapidly spread over the country treaties were, in a large number of instances, made only to be broken. When the advance of civilization found them as barriers in its way, they could not stand as finalities, although they were usually called so. That in the frequent and rapid changes to which those treaties were subjected, the Indians sometimes suffered great injustice, no fair-minded man will deny.

In the course of time new difficulties supervened. As the Indians were crowded out of their hunting-grounds their sustenance became precarious, and upon the government devolved the duty to supply them with food and clothing. That duty was and is now performed on a contract system, and through Indian agencies located at a great dis-

tance from the seat of the general government, and far-removed from its immediate supervision. Thus tempting opportunities were presented for fraud and peculation, demoralizing the service, and resulting, in many instances, in grievous disappointment and suffering among the Indians. Not seldom the promises made to them failed of the expected performance on account of insufficient appropriations. In this way the Indian has become distrustful of the good faith of the whites.

Taking all these things together: The interspersion of white settlers, reckless adventurers and more or less wild Indians in one another's way; the anomalous and, in some of its features, absurd treaty system with its ever-changing "finalities," its frequent deceptions, unavoidable misunderstandings and incessant disappointments; the temptations to fraud and peculation in furnishing and distributing supplies; the careless and blundering management of agents, removed from immediate supervision; the sometimes accidental, sometimes culpable non-fulfillment of promises and engagements; the distress and suffering ensuing therefrom, and the comparatively lawless and uncontrollable condition of society in that part of the country which the bulk of the Indian population inhabits we find in the "Indian question" an array of difficulties, complications and perplexities, a complete solution of which, in a short period of time at least, appears unattainable. What, under such circumstances, can be done is, to adopt and follow a plan of systematic action calculated to mitigate the evils inherent to the existence of an incongruous population among us, and to confine them within the narrowest possible limits by improving the condition of the Indians as much as it is capable of improvement, and removing the causes of hostile collision between the Indians and the whites.

In my opinion, our efforts should be mainly directed to the following points:

1. The first thing necessary is that we should keep good faith with the Indians in every respect; we should never promise them more than we are able and willing to perform, and then perform what we have promised.

2. The pursuit of hunting is as much as possible to be discouraged among the Indians. The excitement of the chase stimulates their war-like propensities. When the Indians cease to be hunters, they will in a great measure cease to be warriors. To this end they should be permitted to possess only a limited supply of arms and ammunition, and their ponies should be exchanged as much as practicably for cattle.

3. As a number of Indian tribes are still depending, in part at least upon hunting for their sustenance, their wants must be provided for in another way. They should be gradually gathered together upon a smaller number of reservations where agriculture and cattle-raising can be carried on with success, and where they can easily be supplied with their necessities until they are self-sustaining.

The Indian Territory has room for most of the southwestern tribes, which should be gradually located there as they come under the control of the government. One or two reservations in the northwest, this side of the mountains, and a similar consolidation of reservations on the Pacific slope, to be determined upon after more minute inquiry into local circumstances, will accommodate the northern Indians. The interspersion of Indians and whites, which is so apt to lead to troublesome collisions, can in this way be considerably limited, and greater facilities will be afforded for the promotion of civilization.

4. While Indians cannot be expected to become successful farmers at once, several tribes have already made appreciable progress in that respect, and others are likely to do so under favorable circumstances and judicious management. It will probably be found that many tribes are more adapted to pastoral pursuits, and in such cases agriculture, although not to be neglected, should be made subordinate to the raising of cattle. All beginnings in such things will necessarily be small and slow, but they should be patiently guided and encouraged by attentive supervision and liberal aid.

5. The enjoyment and pride of the individual ownership of property being one of the most effective civilizing agencies, allotments of small tracts of land should be made to the heads of families on all reservations, to be held in severalty under proper restrictions, so that they may have fixed homes. Indians who can furnish sufficient evidence that they have supported their families for a certain number of years should be admitted to the benefits of the homestead act, and, if they are willing to detach themselves from their tribal relations, to the privileges of citizenship.

6. To protect the security of life and property among the Indians, the laws of the United States, to be enforced by proper tribunals, should be extended over the reservations, and a body of police, composed of Indians, and subject to the orders of the government officers, should be organized on each of them. It is a matter of experience that Indians thus trusted with official duty can almost uniformly be depended upon in point of fidelity and efficiency.

7. The establishment of schools for the instruction of the young is gradually being extended among the Indian tribes under our control. The advantage to be derived from them will greatly depend upon their discipline and the course of instruction. As far as practicable, the attendance of Indian children should be made compulsory. Provision should be made for boarding children at the schools, to bring them more exclusively under the control of educational influences. One of the most important points is that they should be taught to speak and read the English language. Efforts have been made to establish and teach the grammar of Indian dialects and to use books printed in those dialects as a means of instruction. This is certainly very interesting and

meritorious philological work, but as far as the education of Indian children is concerned, the teaching of the English language must be considered infinitely more useful. If Indian children are to be civilized, they must learn the language of civilization. They will become far more accessible to civilized ideas and ways of thinking when they are enabled to receive those ideas and ways of thinking through the most direct channel of expression. At first their minds should not be overburdened with too great a multitude of subjects of instruction, but turned to those practical accomplishments, proficiency in which is necessary to render civilized life possible. In addition to the most elementary schooling, boys should be practically instructed in the various branches of husbandry, and girls should receive a good training in household duties and habits of cleanliness. In this way, a young generation may be raised up far more open to civilizing influences of a higher kind and more fit for a peaceable and profitable intercourse with the white people.

8. At many of the agencies farmers are employed, and salaried by the government. But in some, if not most cases, the farms have been worked by white men, merely to raise crops for supplying the agencies and the Indians. They are to be turned to much greater advantage. The farms should be used in the first place for the instruction of the youths at school. Besides this, the farmers are to visit the farms cultivated by Indians, to give the latter practical instruction in their work and aid them as far as may be in their power.

9. On the reservations the labor of white men is to be dispensed with and Indian labor to be employed as much as possible. To what extent this can be done, under prudent and energetic direction, is shown by the Commissioner of Indian Affairs in his description of the results accomplished by Agent Wilbur. Proper discrimination should be made in the distribution of supplies and annuity goods and the granting of favors between those who work and those who live as idle vagabonds, so that honest effort be encouraged by tangible recognition and reward.

Some of these reforms have for some time been in progress; others are in course of preparation. Their accomplishment requires time and patient labor, and, above all things, an honest and efficient Indian service.

The Indian service has, in some of its branches, long been the subject of popular suspicion. Without attaching undue importance to vague rumors or allegations, it must be said that frequent investigations have shown that suspicion to be not without good reason. Inquiries instituted by myself since I was charged with the conduct of this department have convinced me of this fact. As a result of such inquiries, presumptive evidence of fraudulent practices of a gross character came to my notice, which justified me in handing over a number of cases to the Department of Justice for criminal prosecution as well as civil action. While following the principal object of discovering abuses at present existing, I have thought it my duty to extend, incidentally, such

investigations over past transactions, believing it well to impress officers of the government with the fact that they will not escape from their responsibility when they leave their offices, and contractors that neither their plunder nor their persons will be safe, although their accounts may have been closed and the money gone into their pockets. Such a lesson, taught in the most incisive manner, will not fail to have a wholesome effect, and, indeed, it is a most necessary one with regard to the Indian service, whose extensive ramifications render a minute supervision extremely difficult. There is no doubt that fraud in the performance of contracts and dishonest practices in the delivery and distribution of supplies and annuity goods have frequently been the cause of just discontent among the Indians, sometimes resulting in trouble and disaster.

I do not deem the present machinery of the Indian service sufficient for the prevention or discovery of abuses and fraudulent practices. The inspectors and superintendents, who are charged, among other things, with such duty, have in but rare instances been successful in ferreting out the wily expedients resorted to by dishonest contractors or agents. The records of the Indian Office bear out this assertion. When a superintendent or an inspector visits an agency, his coming is almost always known beforehand, so that there is time enough to conceal evidences of fraud and mismanagement. It is very like "catching birds with a brass band." What the Indian Bureau needs, perhaps more than any other branch of the government, is a special service, composed of efficient agents, who, under the immediate control of the department, can move secretly, and can pounce upon the point to be investigated without premonition. I venture to express the hope that Congress will not refuse the appropriation asked for to serve this purpose. A proper use made of such an appropriation will not only improve the character of the service, but also be an efficient measure of economy.

I desire to add that the investigations carried on by this department for the discovery and correction of fraudulent practices are, in many respects, seriously hampered by its want of power to compel the attendance and pay the fees of witnesses and to punish for contempt. We may, therefore, frequently fail in our inquiries, not because the will but because the means are lacking. Congress can exercise that power to its fullest extent, and Congressional investigations may, therefore, become very desirable when the department, for the reasons stated, finds itself unable to go to the bottom of suspected transactions—unless Congress sees fit to invest the department with such authority as is required to accomplish the object, by amending sections 183 and 184, Revised Statutes, so as to enlarge the powers of the Secretary of the Interior in this respect.

INDIAN AGENTS.

That the office of an Indian agent is a very responsible one, requiring high moral qualities and a superior business capacity, and that a salary of \$1,500 a year, without a fair prospect of advancement, is, under ordinary circumstances, inadequate to induce men of such caliber to expose themselves and their families to the discomforts and privations of frontier life, has too frequently been stated by my predecessors in their reports to need repetition here. The consequences to which such false economy is apt to lead need scarcely be described. The report of the Commissioner of Indian Affairs furnishes some interesting illustrations. I cannot too urgently commend to the attention of Congress the gradation in the salaries of Indian agents which he suggests. Even higher salaries than he recommends might be paid, and prove wise economy in the end. The proposed gradation in salaries is not only just in itself, by making pay correspond with responsibility, but will also have the advantage of holding out to an agent who distinguishes himself in the performance of his duties, the prospect of promotion to a more important and better-paying place. The selection of Indian agents is one of the most difficult tasks of this department. No man of experience in public life need be told how little ordinary recommendations can be depended upon to furnish men well fitted for the discharge of complicated and delicate duties and responsibilities. The present system which permits religious societies to nominate candidates for Indian agencies is, in some respects, undoubtedly an improvement upon the former practice of making appointments in the Indian service on political grounds. But that the present system is by no means perfect, is demonstrated by the frequent necessity of changes. The Indian service is very much in need of the element of stability. An arrangement enabling the department to assign an officer upon his entrance into the service to a place of minor importance and then to promote him in grade of duty and pay according to merit, will, in a great measure, supply that want, and in the course of time give us a body of far more experienced, efficient, and trustworthy agents than any mode of selection heretofore in practice can ever be expected to furnish.

It gives me great pleasure to acknowledge the valuable service rendered by the Board of Indian Commissioners in the supervision of purchases and the examination of contracts and accounts, as well as by some of its members by visiting Indian agencies and tribes, and by inquiring into and giving the department very valuable information concerning their condition and needs. The board has not yet made its annual report, and I can therefore not speak of its operations in detail. As soon as that report reaches me, it will be duly brought to the notice of the Executive and of the two houses of Congress.

Whenever there was occasion to call upon the War Department for assistance in the management of Indian affairs, that assistance has always been granted with the greatest promptness, and in a spirit of harmonious co-operation which I cannot too gratefully acknowledge.

PUBLIC LANDS.

I have the honor to present the following abstract of the operations of the General Land Office under the laws relating to the survey and disposal of public lands during the fiscal year ending June 30, 1877:

	Acres.
Disposal of public lands by ordinary cash sales.....	740, 686. 57
Military bounty land warrant locations under acts of 1847, 1850, 1852, and 1855	97, 480. 00
Homestead entries.....	2, 178, 098. 17
Timber-culture entries.....	520, 673. 39
Agricultural college scrip locations.....	1, 280. 00
Approved to States as swamp	320, 935. 05
Certified to railroads	700, 791. 96
Certified for wagon-roads.....	61, 543. 18
Certified for agricultural colleges.....	63, 443. 04
Certified for common schools	27, 973. 92
Certified for universities	3, 235. 83
Internal-improvement selections	50, 984. 91
Sioux half-breed scrip locations	2, 655. 29
Chippewa half-breed scrip locations.....	5, 422. 94
Special scrip entries under acts of 1858, 1860, and 1872.....	60, 460. 45
Entries under the mining laws.....	14, 103. 00
Total.....	4, 849, 767. 70
Disposals for previous year.....	6, 524, 326. 36
Decrease as compared with sales of preceding year	1, 674, 558. 66

CASH RECEIPTS UNDER VARIOUS HEADS.

Purchase-money of land sold.....	\$969, 317 04
Homestead fees and commissions.....	333, 428 34
Timber-culture fees and commissions.....	53, 298 00
Agricultural college scrip fees.....	36 00
Fees in pre-emption and homestead filings.....	56, 979 00
Fees on military bounty land warrant locations	1, 868 50
Fees for transcripts furnished by local officers.....	784 08
Fees on mineral filings and protests	7, 321 00
Fees on railroad and wagon-road selections	14, 999 80
Swamp land indemnity fees	1, 384 00
Donation fees.....	1, 635 00
Fees on Valentine scrip and university selections	3, 080 87
Fees on transcripts furnished by the General Land Office.....	8, 837 60
Total.....	1, 452, 969 23

SURVEYS.

	Acres.
Total area of the land States and Territories.....	1, 814, 769, 920
Surveyed during past fiscal year.....	10, 847, 082
Previously surveyed.....	702, 725, 655
	<u>713, 572, 737</u>
Remaining unsurveyed.....	1, 101, 197, 183

TIMBER LANDS.

The subject of the extensive depredations committed upon the timber on the public lands of the United States has largely engaged the atten-

tion of this department. That question presents itself in a twofold aspect: as a question of law and as a question of public economy. As to the first point, little need be said. That the law prohibits the taking of timber by unauthorized persons from the public lands of the United States, is a universally known fact. That the laws are made to be executed, ought to be a universally accepted doctrine. That the government is in duty bound to act upon that doctrine, needs no argument. There may be circumstances under which the rigorous execution of a law may be difficult or inconvenient, or obnoxious to public sentiment, or working particular hardship; in such cases it is the business of the legislative power to adapt the law to such circumstances. It is the business of the Executive to enforce the law as it stands.

As to the second point, the statements made by the Commissioner of the General Land Office, in his report, show the quantity of timber taken from the public lands without authority of law to have been on enormous extent. It probably far exceeds in reality any estimates made upon the data before us. It appears, from authentic information before this department, that in many instances the depredations have been carried on in the way of organized and systematic enterprise, not only to furnish timber, lumber, and fire-wood for the home market, but on a large scale, for commercial exportation to foreign countries.

The rapidity with which this country is being stripped of its forest must alarm every thinking man. It has been estimated by good authority that, if we go on at the present rate, the supply of timber in the United States will, in less than twenty years, fall considerably short of our home necessities. How disastrously the destruction of the forests of a country affects the regularity of the water supply in its rivers necessary for navigation, increases the frequency of freshets and inundations, dries up springs, and transforms fertile agricultural districts into barren wastes, is a matter of universal experience the world over. It is the highest time that we should turn our earnest attention to this subject which so seriously concerns our national prosperity.

The government cannot prevent the cutting of timber on land owned by private citizens. It is only to be hoped that private owners will grow more careful of their timber as it rises in value. But the government can do two things: 1. It can take determined and, as I think, effectual measures to arrest the stealing of timber from public lands on a large scale, which is always attended with the most reckless waste; and, 2. It can preserve the forests still in its possession by keeping them under its control, and by so regulating the cutting and sale of timber on its lands as to secure the renewal of the forest by natural growth and the careful preservation of the young timber.

With regard to the point first mentioned, I call attention to the elaborate statement made by the Commissioner of the General Land Office in his report concerning the methods followed in enforcing the law against timber depredations hitherto. It appears that those method

have, in a great measure, been unavailing in arresting the evil, and upon mature consideration of the subject, the conclusion was reached by this department that an important change was imperatively demanded by the public interest. It was found that the "stumpage system" formerly in use, and the practice of compromising with the depredators, which uniformly left tempting profits to the latter, tended rather to encourage the depredations than to stop them, and that the only way to arrest the depredations was by seizing the stolen property wherever found and by punishing the depredators. My views on this subject, and the policy adopted and carried out by this department, were set forth in a letter addressed to the honorable the Attorney-General, dated August 29, as follows :

* * * * * I avail myself of this opportunity to state the rule of action I have adopted for this and similar cases.

While it is my desire to dispose of the logs seized by the officers of the Government on terms as advantageous as possible to the United States, it is the principal object of the operations of this department, recently set on foot, not only to bring money into the public treasury, but to put an end to the timber depredations committed on the public lands. To this end, it is above all things necessary that the depredators be effectually deprived of every possibility of deriving any benefit or profit from the wrongful acts they have committed. As long as they are permitted to hope that even after the seizure by Government officers of the timber wrongfully taken from the public lands, they may by way of compromise acquire rightful possession of the logs on terms profitable to themselves, the temptation to continue the depredations will not cease to exist, and the depredations will go on. It is for this reason that I have directed that the stumpage system hitherto prevailing be discontinued; for the same reason I withhold my approval from every compromise which would permit the logs seized to pass into the possession of the depredators with any chance of profit; and I insist upon the current market-price of the logs at the place where they are held.

If in following this rule small lots of logs should remain unsold at places where competition is not active, or in cases where the trade combines against the Government, that loss will be trifling compared with the great advantage gained if by strict adherence to this rule the depredations are terminated. I desire to make those who hitherto have carried on these depredations with profit understand that in attempting to steal timber from the public lands they will in any event lose the value of their labor and their expenses, and expose themselves to criminal prosecution.

With regard to the criminal prosecution of depredators, I would recommend that they be not confined to those mostly poor persons who actually cut timber on public lands with their own hands, but that they be directed as well and principally against the parties who are found to have organized and directed the stealing of timber on the public lands on a large scale and derived from that criminal practice the greatest profit.

As is shown by the Commissioner of the General Land Office in his report, a considerable number of suits were instituted in different parts of the country, some of which have already been tried and decided in favor of the government. I have reason to believe that the measures taken by the department have already stopped the depredations on the public lands to a very great extent, and that, if continued, they will entirely arrest the evil. A comparatively small number of watchful and energetic agents will suffice to prevent in future, not, indeed, the stealing of

single trees here and there, but at least depredations on a large scale To this end, however, it is necessary that Congress, by an appropriation for this purpose, to be immediately available, enable this department to keep the agents in the field, and also to provide a more speedy and effective system for the seizure and sale of logs, lumber, or turpentine, cut or manufactured from timber on the public lands, than is now provided by existing laws. I would also recommend that section 4751 of the Revised Statutes be so amended as to provide that all penalties and forfeitures incurred under existing laws for cutting timber on the public lands except trespasses committed on lands reserved for naval purposes, shall be sued for, recovered, and accounted for under proper regulations by the Secretary of the Interior.

The enforcement by this department of the policy above stated has called forth remonstrance from several parts of the country where seizures were made. Lumber-merchants, saw-mill owners, and timber-operators in some of the timber districts complained that property had been or was apt to be seized together with logs wrongfully taken from the public lands of the United States, and that, by the proceedings carried on, business in certain localities would be severely injured and many laboring people put out of work. The agents of this department are instructed to use the utmost care in respecting private property; and as far as the department is informed, those instructions have, a very few trifling and promptly corrected mistakes excepted, been strictly obeyed. As to the injury done to business, if that business consists in wrongfully taking timber from the public lands of the United States and manufacturing it into lumber and selling it, it is just the business which is the duty of this department to suppress for the protection of the public interest.

Other complaints came from some of the mining States and Territories, setting forth that the majority of their lands not having been surveyed nor being adapted to agriculture, and the timber lands not being open to purchase, the people of those States and Territories cannot obtain the timber necessary for their mining operations and smelting-work nor even fuel for their homes, unless they take it from the public land. This complaint is certainly entitled to consideration, and, with due regard for the equities of the case, the department has abstained from all criminal prosecutions and caused seizures to be made or suits commenced only where timber had been taken from the public lands in large quantities for sale to railroad companies or smelting-works, or to supply of the market on a large scale. In such cases, also, the plea has been made that railroad-ties, building-timber, and fire-wood for running smelting-works could not be obtained in any other way, except from great distance at large expense. This is true; but it is also true that those who have supplied themselves, without authority of law, from the public lands should at least be held to pay a fair price for the property so taken, as that kind of property must be paid for elsewhere, and

for this the department affords them an opportunity until by proper legislation they are enabled to obtain the necessary supply of timber and fire-wood in a legal way.

Moreover, nowhere is a wasteful destruction of the forests fraught with more dangerous results than in mountainous regions. The timber grows mostly on the mountain-sides, and when these mountain-sides are once stripped bare, the rain will soon wash all the earth necessary for the growth of trees from the slopes down into the valleys, and the renewal of the forests will be rendered impossible forever; the rivulets and water-courses, which flow with regularity while the forest stands, are dried up for the greater part of the year, and transformed into raging torrents by heavy rains and by the melting of the snow, inundating the valleys below, covering them with gravel and loose rock swept down from the mountain-sides, and gradually rendering them unfit for agriculture, and, finally, for the habitation of men. Proper measures for the preservation of the forest in the mountainous regions of the country appear, therefore, of especially imperative necessity. The experience of parts of Asia, and of some of the most civilized countries in Europe, is so terribly instructive in these respects that we have no excuse if we do not take timely warning.

To avert such evil results, I would suggest the following preventive and remedial measures: All timber-lands still belonging to the United States should be withdrawn from the operation of the pre-emption and homestead laws, as well as the location of the various kinds of scrip.

Timber-lands fit for agricultural purposes should be sold, if sold at all, only for cash, and so graded in price as to make the purchaser pay for the value of the timber on the land. This will be apt to make the settler careful and provident in the disposition he makes of the timber.

A sufficient number of government agents should be provided for to protect the timber on public lands from depredation, and to institute to this end the necessary proceedings against depredators by seizures and by criminal as well as civil action.

Such agents should also be authorized and instructed, under the direction of the Department of the Interior or the Department of Agriculture, to sell for the United States, in order to satisfy the current local demand, timber from the public lands under proper regulations, and in doing so especially to see to it that no large areas be entirely stripped of their timber, so as not to prevent the natural renewal of the forest. This measure would enable the people of the mining States and Territories to obtain the timber they need in a legal way, at the same time avoiding the dangerous consequences above pointed out.

The extensive as well as wanton destruction of the timber upon the public lands by the willful or negligent and careless setting of fires calls for earnest attention. While in several, if not all, of the States such acts are made highly penal offenses by statute, yet no law of the United States provides specifically for their punishment when committed upon the public lands, nor for a recovery of the damages thereby

sustained. I would therefore recommend the passage of a law prescribing a severe penalty for the willful, negligent, or careless setting of fires upon the public lands of the United States, principally valuable for the timber thereon, and also providing for the recovery of all damages thereby sustained.

While such measures might be provided for by law without unnecessary delay, I would also suggest that the President be authorized to appoint a commission, composed of qualified persons, to study the laws and practices adopted in other countries for the preservation and cultivation of forests, and to report to Congress a plan for the same object applicable to our circumstances.

I am so deeply impressed with the importance of this subject, that I venture to predict, the Congress making efficient laws for the preservation of our forests will be ranked by future generations in this country among its greatest benefactors.

DESERT LANDS.

A large majority of the lands west of the one hundredth meridian are unfit for agricultural purposes without artificial irrigation, and the area on which artificial irrigation appears possible is very small. The homestead and pre-emption laws are therefore practically inapplicable to lands of that class, for the simple reason that agricultural settlement on small subdivisions is impossible. Extensive tracts on the "plains," however, can be made useful as pasturage for the raising of cattle; in fact, they are being used for that purpose on a large scale. The stock-raising interest on the plains is gaining immense proportions, but it is carried on upon the public domain without the authority as well as without the protection of law, and the government derives no benefit from such use of the public lands. Some system should be devised to make these lands a source of public revenue, and to put the enterprise of the citizens engaged in such pursuits upon a legal basis. The government directors of the Union Pacific Railroad quote, in their annual report to this department, a letter from a gentleman engaged in cattle-raising on the plains, of which the following is an extract:

Under existing laws, one man can only attain title to one section of land in a body within the Pacific Railroad limits, i. e., a man can purchase a full section from the railroad company, but it is surrounded on all sides by government land, which is only open to homesteads and pre-emptions. It has been fully demonstrated that lands west of the one hundredth meridian are only fit for grazing purposes, and can only be utilized as grazing-lands when held in large tracts or ranges. The quantity of land required to support an animal by grazing alone is so great that it would be impossible to purchase the lands at the government price, or at any price that would look reasonable. The result is, that no lands are sold, and the stock-raisers occupy the lands without any legal rights, while the government and the railroad company get no compensation. One evil that grows out of this system is, that the stock-grower, having no defensible right to his range, does nothing toward improving or fencing it. His buildings and corrals are of the most temporary nature, and he is prepared at any time to move his herds wherever better ranges or less-crowded pastures offer.

* * * *

I think the following plan would entirely counteract all the evils mentioned, and would make a return to government and railroad company from lands that otherwise

will always remain unsold and valueless. The government and railroad company jointly lease to responsible stock-growers all lands lying west of the one hundredth meridian of longitude in blocks of, say, from 50 to 500 square miles, at such an annual rental, and for such term of years, and with such other restrictions as will best protect the interest of the government and railroad company, and will give the stock-raiser such a right to his range as will protect him from encroachment, and warrant him in fencing his range, besides making permanent investments in corrals and ranch buildings. The arguments in favor of some such plan as this are so many, and the objections so few, that it seems to me only necessary to have it presented to Congress in proper form to insure its adoption. The enormous increase of the cattle-interest on the western plains, and the present chaotic state of the grazing system, demand that some intelligent action should be taken at once.

I concur with the writer of this letter as to the general object in view with regard to lands not irrigable. It appears to me that the system of leasing those lands would be preferable to that of selling them in large bodies, for the reason that it would leave open to the government another disposition of them in the future, if such should become advisable. Instead of the suggested plan of leases to be made "jointly" by the government and the land-grant railroad companies to stock-raisers, I would recommend that an arrangement be made with such railroad companies by which in desert-land regions the latter receive the even sections in addition to the odd sections on one side of the road, and release to the government the odd sections on the other, so that by the government as well as the railroad companies the land on either side of the roads be held in a solid body. If the system of leasing desert lands not irrigable be adopted, care should be taken so to regulate it by law as to prevent wealthy capitalists from obtaining temporary possession of very large tracts to the exclusion of stock-raisers of small means, especially in the vicinity of the great lines of transportation. It would be very questionable policy to lease "blocks" of so large a size as 500 square miles, to one party, as the writer of the letter above quoted suggests. While the homestead law is practically inapplicable to desert lands, its general object should not be lost sight of. It is a matter of public interest, not only that there be as much stock raised, but also that there should be as many stock-raisers accommodated, as possible, on the public lands of that description.

I would respectfully ask that the attention of Congress be invited to this important subject.

DESERT-LAND LAW.

Congress, at its last session, passed an act to provide for the sale of desert lands in certain States and Territories. This act provides—

First. That citizens of the United States, and persons of certain specified qualifications, may file with the register and receiver of any land-district in which desert land is situated, a declaration of intention under oath, to reclaim within three years thereafter, by irrigation, a tract of desert land, surveyed or unsurveyed, not exceeding one section; and that upon payment of twenty-five cents per acre the applicant shall acquire an inchoate right thereto.

Second. That at any time thereafter within the period above named, upon making satisfactory proof to said register and receiver of the reclamation of said tract of land,

in the manner aforesaid, and the payment of the additional sum of one dollar per acre, the applicant shall be entitled to a patent for said tract.

Third. That all lands, exclusive of timber and mineral lands, which will not, without irrigation, produce some agricultural crop, shall be deemed desert lands.

While it is desirable that desert lands should be reclaimed for agricultural purposes by irrigation, and that proper encouragement be offered to that end, a wise regard for the public interests does not permit, wherever there is public land capable of successful cultivation in small farms, and of thus furnishing homesteads for people of limited means, that extraordinary facilities should be given to the capitalist to acquire such land for the formation of large estates. It is believed that the proof required by the above-named act, as to the quality of the lands, is not sufficient to prevent lands not desert from being acquired under it, while the entire absence of any provision prescribing what portion of land in the tract entered shall be irrigated, the cultivation and improvements which shall constitute reclamation, the penalties or forfeitures for abandonment, or sale of the applicant's interest before making final proof and payment, renders the act liable to be taken advantage of for objects not contemplated by it nor compatible with the public interest.

I therefore recommend that the act be so amended as to require, before the entry is allowed, that the desert character and quality of the tract sought to be entered shall be established by competent testimony to the satisfaction of the register and receiver of the district in which the land is situated, after notice by publication for four successive weeks to adverse claimants, if any there be; that the quantity or portion of the land in the tract to be irrigated, cultivated, and improved shall be specifically defined; that a neglect or failure to irrigate and improve the quantity or portion of the land in said tract specified, for the period of six months at any one time, shall be considered an abandonment of the same.

While a party who has made an entry under said law has no more right to sell or contract to sell, or in any manner encumber the right of interest which he has acquired, than a homestead or pre-emption settler has under either the homestead or pre-emption laws before final proof, still, as there seems to be some misapprehension as to the rights of applicants on this subject, I would recommend that the law be so amended as expressly to prohibit the selling or contracting to sell, or encumbering of the right or interest which the applicant acquires, until final proof and payment therefor has been made; and that, upon satisfactory evidence being produced of the violation of such prohibition, the applicant shall be deemed to have forfeited all his right and interest therein, and thereupon his entry shall be canceled.

PRIVATE LAND-CLAIMS.

The enactment of some law providing a more speedy settlement of the private land-claims in the territory (except California) acquired from Mexico by the treaty of Guadalupe Hidalgo in 1848, and the Gadsden

treaty of 1853, is imperatively demanded. For the purpose of carrying out the provisions of said treaties, an act of Congress, approved July 22, 1854, charged the surveyor-general of the Territory of New Mexico with the duty of ascertaining and reporting to Congress the origin, nature, and extent of all private claims within his district, the title to which were derived from the Spanish or Mexican Government. The provisions of this act were subsequently extended to the Territories of Arizona and Colorado, (now the State of Colorado.)

During the twenty-three years in which this law has been in force, the surveyor-general of New Mexico has reported to Congress for confirmation one hundred and twenty-seven of said claims, of which number seventy-one have been confirmed, leaving fifty-six now pending before that body for confirmation.

It is impossible to state accurately the number of these claims still remaining unsettled; but I think it is safe to state that there are at least one thousand, and, at the rate at which they have heretofore been settled and determined, it is impossible to foretell when the last of them will be finally adjudicated. In the mean time, a cloud is cast upon titles perfect in themselves, a strong incentive is offered for the manufacture of fraudulent title-papers, witnesses die or remove to parts unknown, the ancient records upon which the claims are based are lost or defaced, the difficulties in detecting frauds and determining the validity of titles are multiplied, and the probability that many fraudulent claims may escape detection is increased.

Many of these claims are for a given quantity of land, within much larger exterior boundaries, yet by the act above mentioned the larger quantity is held in a state of reservation until the grant is finally adjusted, and thus thousands of acres of valuable lands are kept out of the market for an indefinite period, and this, too, whether the claim is genuine or fraudulent.

Congress has no doubt acted wisely in refusing thus far to confirm any greater number of said claims. Some of those already confirmed have been found, upon final survey, to contain a quantity of land largely in excess of the quantity originally intended.

The same act which provided the present system of ascertaining and determining the validity of these claims also extended the public-land system to the Territory within which they are situated, and the conflict arising from the want of harmony between the two systems has been the cause of much difficulty and strife between the grant claimants and settlers. This is especially true in the Territory of New Mexico.

The complaints which have reached me during the last few months, growing out of the difficulties arising from these conflicting systems, induce me to most earnestly recommend the passage of an act providing for the appointment of a commission, with full power to hear and determine the validity, subject to an appeal to the United States courts, of all the claims within the Territory named.

LAPSED LAND GRANTS.

I desire also to invite special attention to the fact that a large number of the grants of the public lands made to aid in the construction of railroads, and of various works of internal improvement, have expired by limitation.

The lands embraced within the limits of these grants have, in most cases, been withdrawn from sale and disposal by the government, and must necessarily remain in that condition until some action is taken to declare a forfeiture of the grant, and restore the lands to the public domain.

The Supreme Court of the United States has decided (see Schulenburg *vs.* Harriman, 21 Wall., page 44) that where a grant of land is made, and acquires precision by definite location, so that the right to specific tracts vests in the grantee, it will continue until some legislative or judicial action is taken to declare a forfeiture, notwithstanding the time prescribed for the performance of the conditions subsequent may have expired.

A less expensive and more expeditious mode of disposing of these lapsed grants would be to authorize the Land Department, by an act of Congress, under proper restrictions and limitations, to take possession of the lands in the name of the United States, and declare them subject to sale and disposal after a proper notice by publication.

SURVEYS.

I respectfully invite attention to the recommendations made by the Commissioner of the General Land Office concerning the surveys of public lands. He suggests: "1. The consolidation of all the offices of surveyors-general into one, which shall be located in Washington. 2. The abolition of the contract system. 3. The appointment of a surveyor-general of the United States, who shall be authorized to appoint as many assistants as may be required to make the surveys as fast as may be deemed necessary or provided by law."

I fully concur with the Commissioner in these recommendations. It is the experience of this department that the present system of conducting surveys has proved to be an extensive machinery for spending appropriations without a corresponding benefit to the country. Large sums have been wasted in laying out the desert into small farm-lots. A reorganization of this branch of the service, for reasons of economy as well as to facilitate a more direct supervision of the work done, appears very desirable. The presentation of the subject in the report of the Commissioner is respectfully commended to the consideration of Congress.

RAILWAYS.

The facts and figures herein set forth are compiled from the annual reports of the companies.

The capital stock of the Union Pacific Railroad Company amounts to \$36,762,300, and has all been paid in. Certificates for full-paid stock

the number of 367,450 shares, of \$100 each, have been issued, and are outstanding. The receipts for the year ending 30th June, 1877, were, from transportation of passengers, \$4,237,952.58; of freight, \$3,036,621.87; and from miscellaneous sources, \$1,444,769.37; total, \$3,719,343.82. These figures include "the amounts earned from, but withheld by, the United States, for transportation of its passengers, freight, and mails." The expense of operating the road for the year, was \$402,252.24; leaving net earnings, \$8,317,091.58. The construction-accounts of the company, including some unsettled accounts with contractors, show the cost of the road at \$117,334,256.10. The total funded indebtedness (including the government loan of \$27,236,512) of the company is \$78,733,712.

The amount of stock of the Central Pacific Railroad Company subscribed is \$62,608,800, of which \$54,275,500 has been paid. The receipts for the year ending 30th June, 1877, from transportation of passengers, were \$5,563,870.07; and of freight, \$10,095,349.87; total, \$15,659,219.94. The operating expenses of the road for the year were \$8,326,614.21; leaving net earnings to the amount of \$7,332,605.73. At the close of said year the indebtedness of the company amounted to \$94,339,500.01; of which \$27,855,680 is due to the United States. This company embraces, by consolidation, (besides the original Central Pacific Company,) the Western Pacific, the California and Oregon, the San Francisco, Oakland, and Alameda, and the San Joaquin Valley Companies.

Stock of the Central Branch Union Pacific Railroad Company to the amount of \$1,000,000, has been subscribed, of which \$980,600 has been paid. The receipts for the year ending June 30, 1877, were, from transportation of passengers, \$40,401.88; and of freight, \$149,947.84; total, \$190,349.72. The amount expended in said year for running expenses and repairs, was \$180,467.72; leaving net earnings \$9,882. The road and fixtures have cost \$3,763,700. The company's indebtedness, in addition to the government loan, and first mortgage of \$1,600,000, and interest unpaid, \$60,000.

The amount of stock of the Kansas Pacific Railroad Company allowed by law is \$10,000,000. Of this \$9,689,950 has been subscribed and paid. The receipts for the year ending June 30, 1877, were: From transportation of passengers, \$967,969.80; of freight, \$2,032,361.36; miscellaneous, \$18,700.30; total, \$3,019,031.46. Total expenses for the year, \$1,674,140.42; leaving net earnings, \$1,344,891.04. The cost of construction and equipment of 673 miles (main and branch line) is \$34,359,540.66. The funded debt of the company is \$28,589,100, of which \$6,303,000 is due to the United States. There are other liabilities to the amount of \$3,115,698.79, making the entire debt \$31,704,798.79. The earnings and expenses, as given in this statement, from July 1, 1876, to November 20, 1876, are taken from the books of the company; those from November 21, 1876, to June 30, 1877, are taken from the books of the receivers. The road went into the hands of receivers on the 10th November, 1876.

Stock of the Sioux City and Pacific Railroad Company to the amount of \$4,478,500 has been subscribed, of which \$1,791,400 has been paid. The receipts for the year ending 30th June, 1877, from transportation of passengers, were \$86,033.11 ; of freight, \$205,898.36 ; from express, \$2,784.71 ; and from miscellaneous sources, \$5,831.21 ; total, \$300,546.39. The expenses of the road and fixtures during said year were \$285,366.64, leaving net earnings, \$15,179.75. The bonded indebtedness of the company is \$3,256,320, of which \$1,628,320 is due to the United States. The floating debt is \$69,955.29.

Stock of the Southern Pacific Railroad Company, of California, to the amount of \$38,122,000 has been subscribed, of which \$36,763,900 has been paid. The amount received for transportation of passengers for the year ending 30th June, 1877, was \$1,646,693.49 ; of freight, \$1,883,900.46 ; total, \$3,530,593.95. The expenses of the road and fixtures for said year, were \$1,724,174.41, leaving net earnings \$1,806,419.54. The bonded indebtedness of the company is \$29,300,000. The construction of additional portions of this road has steadily progressed since the date of the company's last annual report. There have been constructed and brought into operation during the year ending 30th June, 1877, 253.78 miles. This whole distance has been laid with steel rails, weighing not less than 50 pounds per linear yard. The company now has in operation 711.95 miles of road. On the 25th of January last, your predecessor accepted 20 miles of this road, beginning at Goshen and running in a westerly direction ; on the 21st February last, he accepted another section of 20 miles, beginning at a point in the N. E. $\frac{1}{4}$ of section 2, T. 19 S., R. 20 E., Mount Diablo base and meridian, and running in a southwesterly direction ; and on the 2d March, he accepted 78.59 miles, beginning at a point in the N. W. $\frac{1}{4}$ of section 3, T. 2 N., R. 15 W., San Bernardino base and meridian, and running northerly.

The Northern Pacific Railroad Company was reorganized on the 29th of September, 1875, under a plan which had been adopted by the holders of the company's bonds, and under which the company's mortgage was foreclosed. On the 12th of August preceding, all the company's property and franchises were sold under a decree of the United States district court for the southern district of New York, and purchased by a committee of the bondholders for the account of all the holders of the company's bonds and stock, pursuant to the provisions of said plan. This plan of reorganization, approved and confirmed by the said district court, provided for the conversion of the outstanding bonds of the company into "preferred stock," and its stock into "common stock." Up to June 30, 1877, there had been issued of preferred stock to bondholders who had surrendered their bonds for conversion, and also in settlement of claims and salaries, the amount of \$36,609,245.95. Of common stock, there had been issued, to the same date, 139,453 shares, of \$100 each. The company is operating 450 miles of its road from Duluth, at the west end of Lake Superior, to Bismarck ; 105 miles from Kalama to Tacoma, Washington Territory ; and 17 miles from Tacoma toward Wilkeson, 31 miles from Tacoma, to which point

it was expected that the road would be finished by the 20th October; and which, the president of the company informs me, is now completed. The road is definitely located from the mouth of Heart River, on the Missouri, to the mouth of Glendive Creek, on the Yellowstone, a distance of 205 miles. Between the last-named point and the junction of the Deer Lodge and Little Blackfoot Rivers, Montana Territory, the line has not been definitely fixed, though it will probably follow the Yellowstone as far as the mouth of Porcupine Creek, a distance of 200 miles from the mouth of Glendive Creek. In Washington Territory the branch and main line both terminate at Tacoma, on Puget Sound. The cost of surveys during the year ending 30th June last was \$11,785, making the total cost of surveys \$1,124,728.55. This includes the purchase of the right of way. The amount received from transportation of passengers for the year ending 30th June, 1877, was \$283,915.78; of freight \$663,203.05; from miscellaneous sources \$63,930.60; total \$1,011,049.43. The operating expenses for the year were \$477,451.40; leaving net earnings \$533,598.03. The total cost of construction and equipment of the road to that date was \$19,421,977.56. The company's indebtedness to said date was \$309,720.81. As an offset to this debt the company had bills receivable, balances due from other railroad and transportation companies, and from the United States, \$229,100.54; leaving a net indebtedness of \$80,620.27.

Stock of the Atlantic and Pacific Railroad Company to the amount of \$19,760,300 has been subscribed and paid. This company's railroad is completed, with the telegraph line, from Pacific, Mo., to Vinita, Indian Territory, a distance of 327½ miles, and there has been no further construction of the company's line since its report of June 30, 1876. The cost of the surveys of the road to June 30, 1877, is \$323,927.36. That portion of the road lying in the State of Missouri was, on the 8th of September, 1876, sold to the Saint Louis and San Francisco Railway Company, with all its franchises, equipments, and other property pertaining thereto, by the foreclosure of the second mortgage thereon, and the latter company has been operating the part of said road lying west of the State of Missouri since that time. Hence there have been no receipts from passengers or freight by said Atlantic and Pacific Railroad Company to report. The cost of the road and fixtures is \$37,368,789.64. The bounded indebtedness for which the company remains liable is the first-mortgage railroad and land-grant bonds.

Stock of the Texas and Pacific Railway Company to the amount of \$50,000,000 is authorized by law, of which \$7,483,400 has been issued. The receipts for the year ending 30th June, 1877, were, from transportation of passengers, \$531,385.27; of freight \$1,468,694.63; from express \$20,323.37; mail \$31,035; telegraph \$14,494.32; miscellaneous \$4,706; total \$2,070,638.59. The expenses for said year were, for conducting transportation \$442,170; motive power \$310,476.44; maintenance of way \$444,105.96; maintenance of cars \$135,484.79; general expenses \$49,749.37; total \$1,381,986.56; leaving net earnings \$688,652.03. The

entire indebtedness of the company is \$19,264,684.99. There are 443.80 miles of the main line of this road in operation, (and 36.94 miles of sidings,) 111 miles of which has been completed since the date of their last report. On the 8th March last you accepted 127 miles of this company's road.

Denver Pacific Railroad stock to the amount of \$4,000,000 has been subscribed and paid, being the total amount authorized by law. The receipts for the year ending 30th June, 1877, were, for transportation of passengers, \$161,722.96; of freight, \$171,165.29; miscellaneous, \$2,880.65; total, \$335,768.90. The expenses for said year were \$189,370.20; leaving net earnings \$146,398.70. The cost of construction and equipment of the road (106 miles) has been \$6,495,350. The indebtedness of the company is \$2,595,829.91.

INDEBTEDNESS OF THE RAILROAD COMPANIES TO THE UNITED STATES.

Under the act of 1st July, 1862, and 2d July, 1864, subsidy bonds were issued by the United States to six railway companies (Central Pacific, Kansas Pacific, Union Pacific, Central Branch Union Pacific, Western Pacific, and Sioux City and Pacific) to the amount of \$64,623,512. These bonds, having thirty years from date to run, will mature, some in 1896, others in 1897, and others in 1898. The semi-annual interest paid on them will amount, at maturity of the bonds, to \$116,322,321.60 at simple interest, and to \$316,112,571.79 if compounded, or, the principal added thereto, \$180,945,833.60 and \$380,736,083.79 respectively.

WHAT THE PACIFIC RAILROAD COMPANIES HAVE PAID THE GOVERNMENT.

Section 6 of the act approved July 1, 1862, provides that "all compensation for services rendered for the government shall be applied to the payment of said bonds and interest until the whole amount is fully paid." This, however, was amended by section 5 of the act approved July 2, 1864, which provides that "only one-half of the compensation for services rendered for the government by said companies shall be required to be applied to the payment of the bonds issued by the government in aid of the construction of said roads;" which amendment was confirmed by section 9 of the act approved March 3, 1871, enacting "that the Secretary of the Treasury is hereby directed to pay over in money to the Pacific railroad companies * * * one-half of the compensation * * * for * * * services heretofore or hereafter rendered."

The amount of one-half of transportation-accounts for carrying mails, troops, supplies, &c., which has not been paid to the companies, but which has been applied by the government to the payment of their indebtedness, and covered into the Treasury for that purpose, to October 31, 1877, is as follows, viz:

Union Pacific Railroad Company	\$3,657,139 9
Central Pacific Railroad Company	1,493,555 7

Kansas Pacific Railroad Company.....	\$1,307,044 31
Western Pacific Railroad Company.....	9,365 75
Sioux City and Pacific Railroad Company.....	34,391 46
Central Branch, Union Pacific Railroad Company	39,700 13
Total	6,471,197 34

The amount of one-half of the same accounts, which has not been paid to the companies, but withheld under provision of section 2 of the act approved March 3, 1873, whereby the Secretary of the Treasury was directed to withhold all payments, &c., and also under a stipulation entered into as regards the Union Pacific Railroad Company, whereby the judgment against the United States in case No. 571, October term, 1875, of the Supreme Court, was not to be collected until after final judgment in the suit to recover sums claimed to be due to the United States as the five per cent. of net earnings, and which has been applied by the government to the payment of their indebtedness and covered into the Treasury for that purpose, is as follows, viz:

Union Pacific Railroad Company.....	\$1,299,652 00
Central Pacific Railroad Company.....	708,611 62
Kansas Pacific Railroad Company.....	224,635 75
Western Pacific Railroad Company.....	1 25
Sioux City and Pacific Railroad Company.....	31,267 34
Central Branch, Union Pacific Railroad Company	21,048 22
Total	2,285,216 18

Total amount covered into the Treasury..... 8,756,413 52

In addition to this sum, the amount of transportation-accounts rendered by the companies for services performed, and which remained unpaid October 31, 1877, for lack of proper appropriations or for reason that they were in process of settlement, is quite large, and, from the best information to be obtained, is as follows, viz:

Union Pacific Railroad Company	\$1,600,000
Central Pacific Railroad Company	450,000
Kansas Pacific Railroad Company.....	400,000
Western Pacific Railroad Company.....	
Sioux City and Pacific Railroad Company	12,000
Central Branch, Union Pacific Railroad Company	3,000
Total	2,465,000

Total amount paid and to be paid as one-half of transportation-accounts to October 31, 1877, is, on above basis, \$7,703,697.34.

The indebtedness of the companies to the government to October 31, 1877, is as follows, viz:

Railroad company.	Principal.	Interest.	Total.
Union Pacific.....	\$27,236,512 00	\$10,740,648 38	\$37,977,160 38
Central Pacific.....	25,885,120 00	12,519,447 11	38,404,567 11
Kansas Pacific.....	6,303,000 00	2,454,633 03	8,757,633 03
Western Pacific.....	1,970,560 00	988,891 54	2,959,451 54
Sioux City and Pacific	1,628,320 00	845,009 89	2,473,329 89
Central Branch, Union Pacific.....	1,600,000 00	945,059 91	2,545,059 91
Total.....	64,623,512 00	28,493,685 86	93,117,197 86

These amounts are subject to increase or decrease as to total indebtedness by the application of the \$3,285,216.18 and the \$2,465,000 before stated, as the Supreme Court may decide in the suits now pending.

SINKING-FUND.

The Supreme Court of the United States, at the October term, 1872 held, in the case of *The United States vs. The Union Pacific Railroad Company*, (1 Otto, 72,) that the companies cannot be required to pay the interest on the bonds until the maturity of the principal. This decision of the court of last resort leaves the United States powerless, under present laws, to obtain, before the maturity of the bonds, any return for the large sums advanced and to be advanced to the companies; except the one-half compensation for services rendered to the government, and the 5 per cent. of the net earnings of the roads after completion.

These sources are so entirely inadequate to reimburse the United States, that various measures have been suggested for securing payment at the maturity of the bonds. The president of the Union Pacific Company, in a letter addressed to the Secretary of the Treasury on the 9th February, 1875, proposed the establishment of a sinking fund by the annual payment of \$500,000 for twenty years, and of \$750,000 thereafter. This proposition was afterward modified so as to offer to pay \$500,000 for ten years, \$750,000 for ten years, and \$1,000,000 beginning 1st July, 1895. These sums include the charges against the government for transportation and mail-service. The Central Pacific Company shortly afterward made propositions on the same subject.

What is known as the Lawrence bill, which passed the House of Representatives at the first session of the Forty-fourth Congress, requires the Union Pacific Company to pay *semi-annually* the sum of \$994,731, which sum, according to the statement of the Judiciary Committee of the House of Representatives, is necessary to meet the principal and interest due at the maturity of the bonds. Other sums are required by said bill to be paid by the other companies. The proceeds from transportation and mail-service, and 5 per cent. of net earnings, are not included in these sums.

The government directors of the Union Pacific Company, in their last annual report, express the opinion that a *semi-annual* payment of \$500,000, compounded at 6 per cent., together with the one-half of the charges for transportation and the 5 per cent. of the net earnings, will suffice to meet all the liabilities of the company to the United States at the maturity of the bonds. According to their figures, these three items would amount to \$1,000,000 a year, and on their estimate of the one-half transportation and 5 per cent. of net earnings, the sum-total received would vary but little from that named in the bill.

As this important subject receiving in Congress that ear-

est attention which the magnitude of the interests involved deserves, I deem it unnecessary to go into an elaborate discussion of any of the plans proposed. That the law contemplates, and the public interest demands, the full reimbursement to the United States of the whole amount, principal and interest, advanced for the railroad companies, is unquestionable, and I beg leave to offer the following presentation of the ability of the Pacific Railroad Companies to discharge their indebtedness to the government.

THE ABILITY OF THE PACIFIC RAILROAD COMPANIES TO PAY.

In addition to the one-half of transportation accounts for services rendered, the amount of which has been withheld and applied upon the indebtedness of the companies, the act approved July 1, 1862, section six, requires "that, after said road is completed, until said bonds and interest are paid, at least five per centum of the net earnings of said road shall also be annually applied to the payment thereof."

The following approximation is made of the amount due from the companies on this account, exclusive of interest accrued by reason of non-payment annually, to October 31, 1877, viz :

Company.	Road completed.	Years.	Gross earnings.	Operating-expenses.	Net earnings.	Five per cent. of net earnings.
U.P.R.R.....	Nov. 6, 1869	8	*\$85,000,000	\$40,000,000	\$45,000,000	\$2,250,000
C.P.R.R.....	July 16, 1869	8 $\frac{1}{2}$	175,000,000	33,000,000	42,000,000	2,100,000
K.P.R.R.....	Nov. 2, 1868	9	27,000,000	15,500,000	11,500,000	575,000
W.P.R.R.†.....	Jan. 22, 1870	7 $\frac{1}{2}$	-----	-----	-----	-----
S.C. & P.R.R.....	March 3, 1869	8 $\frac{1}{2}$	2,600,000	2,100,000	500,000	25,000
C.B. U.P.R.R.....	Jan. 20, 1868	9 $\frac{1}{2}$	1,300,000	1,500,000	§ Deficit 200,000	-----
Total.....	.....	.....	190,900,000	92,100,000	99,000,000	4,950,000

* Including Omaha bridge earnings and operating-expenses, which are omitted from the published reports of the company.

† Upon the basis of $\frac{1}{10}$ of the total earnings and expenses, which is subject, however, to investigation as to the actual earnings and expenses of the remaining portion of the road.

‡ Consolidated with C. P. R. R. June 22, 1870.

§ An inquiry into this deficit is in progress.

Interest at the rate of 6 per cent. per annum being added to this sum of \$4,950,000, from the time when the annual applications thereof should have been made, will increase it to more than \$6,000,000, which is the amount immediately involved in the pending "Five-per-cent." suits.

The ability of the Union Pacific and Central Pacific Railroad Companies to pay the above sums is fully demonstrated by the following facts, figures, and comparisons :

Omitting the Union Pacific and Central Pacific Railroad Companies from the enumeration, there were at the close of the year 1876, eight hundred and nine (809) railroad companies in operation in the United States, owning 76,258 miles of road. Of these, 181 only paid dividends;

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30 paid 8 per cent., 36 paid over 8 per cent., 115 paid under 8 per cent. and 628 paid no dividends. Of these 809 companies, the earnings of 31 were insufficient to pay "operating-expenses," the earnings of 170 were insufficient to pay "operating-expenses" and "interest," and 216 defaulted on their "bond-interest."

The Union Pacific Railroad Company, and the Central Pacific Railroad Company, did better than ever before in the year 1876, notwithstanding the fact that all other railroad companies suffered from the great depression of trade and industrial enterprise. (See pages XV and XVI of Poor's Manual, 1877.)

Gross earnings	\$31,033,802
Operating-expenses	14,000,286
Net earnings	17,033,517
Bonded interest, paid.....	\$6,612,815
Eight per cent. dividend on stock.....	7,299,000
	13,911,815
Surplus.....	3,121,702

Excepting these two companies from the calculation, but 34½ per cent. of the capital stock invested in railroads pays a dividend; the average rate per cent. of dividends paid is but 2⁸¹/₁₀₀; but 68½ per cent. of the bonded investment in railroads receives interest, and the average rate of interest is but 4²²/₁₀₀ per cent. The two railroads named pay 8 per cent. dividends on capital stock, and 6²¹/₁₀₀ per cent. interest on their bonded debt.

On the "one-hundred miles basis" a comparison between all other roads in the United States and these two roads for the year 1876, is as follows, viz.:

Items.	All other roads.	Union Pac. and Cent. Pacific R.R. roads.
Locomotives used.....	21	
Passenger-cars used.....	26	3
Freight-cars used.....	510	
Capital stock.....	1	
Bonded debt.....	2,912,919	\$4,652,1
Cost of road and equipment.....	2,793,355	7,180,3
Passenger-earnings.....	5,170,322	11,453,0
Freight-earnings.....	184,859	453,7
Total earnings, including mails, &c.....	397,754	806,0
Operating-expenses	686,214	1,378,4
Net earnings	436,604	*621,6
Bond-interest paid	249,610	756,5
Dividends on capital stock	129,087	293,7
	90,180	324,5

*Construction, new equipment, and improvements evidently enter largely into this amount for "operating-expenses."

To illustrate still more fully the ability of the Union Pacific and Central Pacific Railroad Companies to earn money, and with a proper disposal of their earnings in due time to pay off all of their indebtedness,

to the government, the following statement is made. The figures are believed to be nearly correct, having in this and the previous statement been taken largely from "Poor's Manual of the Railroads of the United States."

Items.	Union Pacific Railroad.	Central Pacific Rail-road.	Total of both.	New York Central.	Railroads reporting in Massachusetts.	All railroads in United States reporting, except Union Pacific and Central Pacific Railroads.
Miles of road operated...	1,038 ⁴	1,219	2,257 ⁴	1,000	2,479	67,355
Cost of road	\$114,000,000	\$132,685,389	\$246,685,389	\$77,243,162	\$140,947,113	.....
Cost of equipment	6,000,000	7,494,209	13,494,209	17,349,449	16,500,505	.....
Cost of other property	2,714,588	2,450,684	5,165,270	3,230,199	11,541,434	.....
Total amount of investment	122,714,588	142,630,282	265,344,870	97,892,810	169,079,052	\$3,893,808,307
Cost per mile	118,000	117,500	117,852	98,000	68,204	56,845
Capital stock	36,762,300	54,275,500	91,037,800	89,428,300	118,179,615	2,157,120,875
Bonded debt	51,104,000	55,457,000	106,561,000	39,844,733	51,620,374	2,058,580,368
United States subsidy bonds	27,236,512	27,855,680	55,092,192	.....	.....	9,531,320
Total general liability	115,102,812	137,589,180	252,690,992	129,273,033	160,799,989	4,225,232,563
Passenger-earnings	4,410,00	5,908,821	10,318,821	6,672,966	14,260,815	124,512,264
Freight-earnings	7,710,000	10,773,618	18,483,618	17,593,264	13,644,278	267,907,030
Miscellaneous, mail, &c., earnings	1,400,000	1,464,504	2,864,504	3,780,356	3,102,353	69,780,432
Gross earnings	13,520,000	18,146,943	31,666,943	28,046,588	31,007,446	462,199,726
Operating-expenses	5,230,000	8,732,074	13,952,074	16,124,172	21,460,627	294,074,813
Net earnings	8,300,000	9,414,869	17,714,869	11,922,416	9,546,819	168,124,913
Taxes paid	307,195	378,926	686,181	.....	1,353,685	19,144,041
Interest paid, (bonded)	3,675,000	3,498,331	7,173,331	2,791,629	3,704,698	86,946,758
General expenses, &c	750,000	1,043,186	1,793,186	1,917,711	.....	.....
Dividends	2,939,600	4,832,690	7,772,290	7,139,528	5,858,509	60,740,668
Surplus	628,205	.....	289,881	73,548	.....	1,293,446
Deficit .....	.....	338,394	.....	.....	1,370,273	.....
Miles run by passenger-trains	1,200,000	1,570,435	2,770,435	4,743,485	10,439,856	340,000,000
Mile run by freight-trains	3,500,000	3,359,107	6,859,107	9,278,266	9,464,471	260,000,000
Total passenger-mileage	128,032,924	200,000,000	328,032,924	353,136,145	639,592,115	7,000,000,000
Total freight-mileage	292,002,076	350,000,000	642,002,076	1,674,447,055	628,577,176	21,000,000,000
Passengers carried	202,648	789,702	992,350	9,281,490	41,133,229	200,000,000
Tons of freight carried	900,000	1,114,086	2,014,086	6,803,680	11,327,502	197,082,000

The facts shown by this statement are so striking that a comparison of percentages is quite unnecessary to demonstrate the great advantages which these two Pacific railroads possess over all others in the two principal elements of successful railroading—*high tariffs* and *limited competition*. That these companies are fully able to make sufficient provision for a discharge of their whole indebtedness to the United States seems, therefore, beyond question.

IMPROVEMENT REQUIRED IN THE SYSTEM OF ACCOUNTABILITY.

Under the provisions of section 20 of the act approved July 1, 1862, section 13 of the act approved July 2, 1864, and those of the act ap-

proved June 25, 1868, the Pacific Railroad Companies are required to make certain annual reports to this department, and the government directors are likewise required to communicate, from time to time, information in regard to the affairs of the companies, such as should be in the possession of the department.

Reports have been made by the several companies from year to year but none of the reports rendered have given that *full and specific information in regard to the receipts, expenditures, and indebtedness of the road* which is called for by law, and which is necessary to a full knowledge of their true condition.

The reports made annually by the government directors have furnished much valuable information in regard to the roads, and have intimated and suggested many things whereby the condition of the roads could be improved.

Whether the laws now in force are repealed and new laws passed or not, in justice to the gentlemen who are now filling the positions of government directors, as well as to enable the government to utilize and systematize matters connected with these railroads, in which there is so much at stake, legislation looking to more practical methods of obtaining information seems to be absolutely required.

In order that the amount of net earnings be properly and accurately ascertained, it is desirable that monthly reports, instead of annual ones, be made to this department on proper forms to be prepared and furnished to all the Pacific railroad companies. The business of the two main companies is assuming such large proportions that the annual report is too slow, and altogether of too summary a character to serve the purpose for which it was intended. The government should receive its information in regard to the business and condition of these roads just as often and just as promptly as a board of directors or any officer of the company. The companies should be required to keep their accounts in such manner as to enable them to give promptly and with accuracy any information required by the department.

One of the difficulties at present in the way of obtaining proper information is the fact that the companies put their own construction upon the laws, as to what reports are required of them; and whether they report or not according to the construction of the department, there is no penalty for non-compliance. There is no uniformity in the manner of keeping their accounts or rendering reports to the government.

Not to go too much into detail, it may be stated, that while the law requires that the reports called for shall contain "a statement of the indebtedness of said company, setting forth the various kinds thereof," the companies report the amount of their funded debt, leaving out their floating debt—their entire indebtedness—or failing to give the details thereof; so, with the required "statement of the expense of said road and its fixtures," the entire annual *expense* of operating as well as the amount invested in new property or improvements—*fixtures*—is evidently

required, but has never been furnished in such manner as to give an intelligent idea as to its correctness. The reports of "engineers, superintendents, or other officers who make annual reports to said railroad companies" are required to be furnished, but have not been by all. Again, in the case of the Central Pacific, it is necessary to a proper division of its earnings and expenses, that a separate account and report be had as to that part of the road known as *subsidized*, namely, 866 miles of its 1,219. The Union Pacific fails to report the earnings and expenses of the Omaha Bridge, although decided in 1875 to be a part of their road. The expenditures for improvements, betterments, and for new construction and equipment should be given in detail and verified by a competent officer of the government, and the time of making up their annual statements should be June 30 of each year, conforming to the fiscal year of the government.

These constitute but a few of the shortcomings in the reports made by the companies to this department.

For the supervising of the accounts of these railroads, the government directors recommend that a special bureau should be established in this department. With this recommendation I fully concur. A competent and energetic officer in charge of such a bureau would enable this department to act promptly and intelligently, whenever action on its part is required, in regard to the great interests of the government in these railroads, and to furnish valuable assistance to other departments of the government and to Congress in matters relating thereto.

The report of the government directors of the Union Pacific Railroad Company, (the only one for which such directors are appointed,) for the year ending 30th June last, is herewith transmitted. The act of 1st July, 1862, provided for two such directors to be appointed by the President. The number was increased to five by the act of 2d July, 1864, which also provides that one of them shall be placed on each of the company's standing committees, and at least one on every special committee. They are required to report from time to time to the Secretary of the Interior in answer to any inquiries he may make of them, touching the condition, management, and progress of the work, and to communicate to him, at any time, such information as should be in his possession. They are authorized to go over the road as often as may be necessary to a full knowledge of its condition and management.

Their reports embody much valuable information that would not otherwise come into the possession of the General Government. The suggestions contained in their last report are well worthy of consideration by Congress.

THE KANSAS PACIFIC RAILROAD.

The Kansas Pacific Road was placed in the hands of a receiver 3d November, 1876, in consequence of failure on the part of the company

to pay the interest on its first-mortgage bonds. In a printed paper addressed to me, on the 21st of April last, by the chairman and secretary of a committee of nine of first-mortgage bondholders, it is alleged that said failure to pay interest was owing mainly to the fact that the Union Pacific Railroad Company has persistently refused to transport passengers and freight in connection with the Kansas Pacific and Denver Pacific companies on the terms and in the manner required by the acts of 1st July, 1862, 2d July, 1864, 3d March, 1869, and 20th June, 1874; that said acts contemplated the Kansas Pacific and Denver Pacific railroads as a part of the connected and continuous line between the Missouri River and the Pacific Ocean, intersecting the Union Pacific at Cheyenne, to be operated without any discrimination for or against said roads; that the Union Pacific company has wholly disregarded the repeated requests of the Kansas Pacific and Denver Pacific companies to observe the provisions of said acts, and has denied its obligations to conform thereto, establishing and maintaining, in contravention of said acts, discriminating rates of fare for passengers and freight for merchandise against the Kansas Pacific and Denver Pacific companies; that the distance from Cheyenne to Ogden is 516 miles, one-half the distance from Omaha to Ogden, and yet the Union Pacific Company charges, in many cases, as much for transportation from Cheyenne to Ogden as from Omaha to Ogden, and in all cases out of proportion to the distance traversed, thereby compelling travelers and shippers to go to Omaha as a starting-point, greatly to the damage of the Kansas Pacific and Denver Pacific companies; that while the Kansas Pacific company has made default in payment of interest, the Union Pacific company, by means of the monopoly thus established, has paid 8 per cent. dividends annually to its stockholders, besides paying the interest on its debt, (other than that due the United States;) that the General Government is interested in having said discrimination terminated, in order that the sums advanced to the Kansas Pacific company by the United States may not be utterly lost.

A list of some of the discriminating charges accompanies the paper. That there is such discrimination is beyond dispute. That it is in direct contravention of the letter and spirit of the Pacific railroad acts there can scarcely be serious doubt. There seems to be no disposition on the part of the Union Pacific company voluntarily to remedy this evil, but I am of the opinion that proper steps should be taken to enforce compliance with the acts of Congress.

PATENTS.

The Commissioner of Patents reports that during the year ending June 30, 1877, 19,914 applications for patents were filed.

The number of patents issued, including reissues and designs, was 14,459; the number of caveats filed was 2,658; 1,098 patents were al-

lowed but not issued because the final fee was not paid; 1,275 applications for registration of trade-marks were received; 968 trade-marks were registered; 556 applications for registration of labels were filed; 324 labels were registered.

The total receipts of the office from all sources were \$714,964.73; the total expenditures were \$609,043.24, leaving an excess of \$105,921.49 of receipts over expenditures.

The Commissioner reports that he has found himself embarrassed during the year by the smallness of the appropriations for the regular work of the office, which were less by \$62,000 than the appropriations for the year ending June 30, 1876.

A large part of the expense for the year has been for reproducing, by photolithography, drawings of patents issued in former years. This forms no part of the regular work, but has been carried on toward completion for some years. It is expected that this work will be finished during the present year. Upon its completion a material reduction can be made in the expenses of the office, while the copies of drawings kept for sale will prove a source of revenue.

The Commissioner reports an increasing revenue from the fees for the registration of trade-marks. The fee for registration is \$25, and is payable on filing the application, and, like other fees, cannot be returned to the applicant in case the registration is refused. The Commissioner suggests that it would be more in harmony with the practice of the Patent Office in other cases to require a fee of \$15 upon the filing of the application and an additional fee of \$10 upon the allowance of the claim.

The Commissioner renews the recommendation, made in the report for 1874, that a special appropriation be made for the preparation of complete digests of all patents granted by the United States. Such digests would greatly facilitate the work and insure greater accuracy in the business of the Patent Office. These suggestions are commended to your favorable consideration.

Under a recent arrangement, duplicate copies of all British patents, issued since 1852, 56,000 in number, will be furnished gratuitously to the Patent Office. When properly classified and arranged, these will greatly facilitate the work of the office. The Commissioner suggests that there should be a liberal appropriation for the purchase of books for the Patent Office library, as many recent valuable works having an important bearing upon the business of the office have not yet been placed upon its shelves.

The Commissioner again calls attention to the necessity which exists for additional room for his office, which can be supplied only by the action of the law-making power. Great inconvenience is experienced on account of the want of sufficient space for the working force and material of the office.

PENSIONS.

The annual report of the Commissioner of Pensions shows that at the close of the year ending June 30, 1876, there were on the files of his office 42,809 original Army invalid claims; 19,344 invalid increase; 32,713 Army widows' original; \$14 widows' increase; 973 original Navy invalids; 62 Navy invalid increase; 524 Navy widows' original, and 2 Navy widows' increase claims.

To that number were added during the year 16,532 original Army invalid; 11,214 Army invalid increase; 5,299 original Navy widows'; 780 Army widows' increase; 271 original Navy invalid; 117 Navy invalid increase; 97 original Navy widows', and 16 Navy widows' increase claims.

Seventeen hundred and seventy-one original Army invalid, 132 original Army widows', 4 Army widows' increase, 6 original Navy invalids' and 1 original Navy widow's claims were taken from the rejected files and reopened, making a grand total of 61,112 original Army invalid; 21,558 Army invalid increase; 33,114 original Army widows'; 1,598 Army widows' increase; 1,252 original Navy invalids; 179 Navy invalid increase; 622 original Navy widows', and 18 Navy widows' increase claims, for disposal.

Of claims under the act of February 14, 1871, there were pending at the close of the fiscal year ending June 30, 1876, 341 survivors' and 389 widows' claims; 108 survivors' and 388 widows' claims were filed during the year, and 9 each of survivors' and widows' rejected claims were reopened, making a total of 548 survivors' and 746 widows' claims.

There were examined and allowed during the year 7,134 original Army invalid; 8,922 Army invalid increase; 3,790 original Army widows'; 678 Army widows' increase; 148 original Navy invalid; 76 Navy invalid increase; 71 original Navy widows', and 7 Navy widows' increase claims.

Of claims under the act of February 14, 1871, there were allowed 57 survivors' and 126 widows' claims, making a total of 21,019 pension claims allowed, against 17,451 the year preceding.

There were rejected during the year 13,284 pension claims, as follows: Army invalid, original, 4,609; Army invalid, increase, 7,026; Army widows', original, 1,355; Army widows', increase, 13; Navy invalid, original, 51; Navy invalid, increase, 38; Navy widows', original, 66; survivors of the war of 1812, 43; and widows of soldiers of the war of 1812, 83; leaving on hand unadjudicated on June 30, 1877, 91,981 pension claims of all classes.

The total addition to original claims for pension is 7,110; total reduction of increase claims, 4,639.

The yearly value of claims allowed during the year is \$1,343,534.84 as follows: Army invalid, \$172,453.22; increased pension to invalid, \$369,996.12; Army widows, &c., \$446,292; increased pension to Army widows, \$16,504; Navy invalids, \$16,528.59; increased pension to Navy

invalids, \$2,877; Navy widows, &c., \$10,260; increased pension to Navy widows, \$9.60; survivors of the war of 1812, \$5,568, and widows of the soldiers of said war, \$12,096.

The value of the reduction to the rolls during the year, by reason of death, remarriage, and termination of pension from other causes, is \$1,568,644.10; making a total reduction of \$225,109.26 to the rolls.

The number of Army invalid pensioners on the roll increased during the year 5,809; that of Army widows, decreased 4,112; that of Navy invalids, increased 79; that of Navy widows, &c., decreased 27; while the number of survivors of the war of 1812, and of the widows of the soldiers of said war, decreased 1,404 and 378 respectively.

The total number of pensioners on the roll June 30, 1877, was 232,104, as follows: Army invalids, 114,119; Army widows, 97,055; Navy invalids, 1,722; Navy widows, &c., 1,717; survivors of the war of 1812, 12,802; and widows of soldiers of that war, 4,609.

Yearly value of the rolls, \$25,371,215.43. The total reduction to the rolls was 33.

During the year the following amounts were paid for pensions: to Army invalids, \$12,955,544.15; to Army widows, &c., \$13,348,383.57; to Navy invalids, \$199,619.40; to Navy widows, &c., \$322,926.63; survivors of the war of 1812, \$934,657.82; to the widows of the soldiers of said war, \$361,548.91, making a total of \$28,122,683.48.

The cost of disbursement, including fees of pension agents, fees of examining-surgeons, and compensation of agents, and expenses of agencies, was \$524,129.01. There remained in the hands of pension-agents, June 30, 1877, \$339,197.04.

Of the appropriation for Army pensions, \$453,437.86, and of the appropriation for Navy pensions, \$2,052.61 were not drawn from the Treasury.

The amount of pension due at first payment in claims allowed during the year, was, to Army invalids, \$1,279,874.72; Army widows, &c., \$1,950,852.86; Navy invalids, \$16,786.65, and Navy widows, &c., \$37,422.89, making a total of \$3,284,937.12.

During the year 861 applications for bounty-land were received; 85 warrants were issued, aggregating 13,120 acres of land; and 451 applications were rejected.

The special-service division of the office made 1,926 investigations during the year, resulting in the dropping of the names of 555 pensioners from the roll, in the reduction of the rate of 62 pensioners, and the rejection of 334 pending claims *prima facie* established.

The aggregate saving to the government by reason of these investigations was \$379,026.62, at a cost of \$40,022.78 for per diem allowance to and actual expenses incurred by the special agents.

A number of attorneys were suspended and debarred from practice by reason of illegal practices; 42 cases were submitted to the proper officers for criminal prosecution; 23 indictments were found against offenders against the pension laws; 12 were convicted and 9 were ac-

quitted, while 46 cases are in the hands of various United States attorneys undisposed of and awaiting action.

It is estimated that the sum of \$28,000,000 will be necessary for the pension service during the ensuing fiscal year.

The plan proposed by the Commissioner for the more prompt and efficient settlement of pension claims is worthy of special consideration.

Under the present system pension claims are adjusted on *ex parte* testimony, given by witnesses unknown to the office, and whose affidavits are generally prepared by attorneys dependent for their fees upon a successful prosecution of the case. Testimony thus procured is too often colored to suit the facts necessary to be established, and where the proof involves a question of *sequel* to disabilities incurred in the service, it has been found very unreliable as a basis for correct judgment.

The Commissioner proposes to substitute for this unreliable system with its 1,578 examining-surgeons, necessarily differing in medical skill and judgment, a corps of salaried surgeons, distributed throughout the country, each surgeon assisted by a competent clerk, to be assigned to a given district. Their duties will be to make a personal examination of each case referred to them, examine claimants and witnesses, and transmit the result to the office. The Commissioner gives it as his opinion that by this system a more prompt and just settlement of claims would be secured, and by a proper rating of pensioners a large saving of money would be effected.

The magnitude of the interests involved and the importance of securing speedy adjustment of claims now largely in arrears would appear to call for some radical change in the present defective system of examinations. As the plan proposed by the Commissioner of Pensions is urged not only on the ground of administrative economy, but as a measure of justice to deserving pension-claimants, I earnestly commend it to the attention of Congress.

The Commissioner also recommends amendments to certain sections of the Revised Statutes relating to the payment of pensions. As the changes proposed are for the purpose of removing certain hardships which the present laws inflict, I fully agree with the recommendation.

The consolidation of pension-agencies, in conformity to the President's order of May 7, appears to have been successfully accomplished without inconvenience to the government or the pensioners.

The Commissioner reports prompt payments at nearly all the agencies, and expresses the belief that by a consolidation of the rolls on a uniform plan—and to secure which steps have already been taken—payments even more prompt can be made in the future.

The necessary suspension of the agent at New Orleans on the eve of a payment and the appointment and qualification of his successor caused a delay in payments at that agency. Aside from this, the practical results of the consolidation have been highly gratifying, the saving in

salaries of agents alone, on the basis of former years, being \$142,000 per annum.

The question whether the abolition of all the pension agencies and the payment of all the pensions from Washington is practicable, and what measures should be adopted to that end, is now the subject of earnest consideration; but any change in that direction would require additional legislation, as the law contemplates the paying of pensions through agencies, and the number now established could not well be reduced without a radical change of the existing system.

EDUCATION.

The Commissioner reports that during the year twenty-one thousand written or printed communications have been received from its American correspondents; an equal number of letters have been sent, as well as about eleven thousand bound volumes and seventeen hundred pamphlets.

Efforts have been made to gather and classify the educational statistics of the entire country and to perfect the office-lists of institutions of learning, libraries, and scientific and educational associations; of these, nearly nine thousand furnish statistics and documents to the office for its reports and special publications.

Among the works in progress of preparation are historical reviews of collegiate instruction, of normal instruction, of industrial art education, and of graded school systems in the United States.

The demand for information in regard to education in foreign countries was greatly stimulated by the Centennial; and in response thereto the bureau has in course of preparation circulars and special reports relating to foreign national systems, such as the success of the efforts adopted for public instruction in Great Britain under the educational act of 1870; the progress of industrial and technical education in Germany, France, and Belgium, including trade schools, (weaving, cooking, nursing, &c.,) school for agriculture, forestry, commerce, &c.

The amount apportioned for printing and binding for the fiscal year ending June 30, 1877, having been exhausted in the issue of the report on public libraries, no other publication could be attempted. Since July 1, five circulars or reports have been issued, as follows:

1. The International Conference on Education, held at Philadelphia in connection with the International Exhibition.
2. Manual of the Common Native Trees of the Northern United States, (for the use of teachers.)
3. Circular of Information No. 1, 1877. Education in China.
4. Circular of Information No. 2, 1877. Education in Finland, the Netherlands, Denmark, Würtemberg, Portugal, &c.
5. Contributions to the History of Medical Education in the United States, 1776-1876.

The Commissioner states that the removal of the office, as required by law, to the building occupied by the Pension Office has proved greatly injurious to the work, the new quarters furnishing rooms neither sufficient in number nor appropriate in arrangement.

A great aid to the work of the office is its collection of educational appliances; this already has articles of great value illustrative of educational methods in other countries. There are no rooms provided for its arrangement or display, and no means for its care.

The Commissioner calls attention to the constitutional and traditional practice of the national government in aiding education, and believes the moment is opportune for the execution of a well devised system of supplemental aid, and that this aid will render effectual the local efforts of educators now so greatly embarrassed.

A comprehensive review of the statistics of education in our country in 1877 affords some evidence of improvement over the same in 1876.

In the public schools, with reduced expenditures for salaries and buildings, there has been an effort to improve the quality of instruction by making it consecutive and by bringing it more into harmony with the developments of the child's nature and the necessities of his future occupations. Natural science has been taught less from text-books and more from specimens and in the field. Industrial drawing, as an element of popular instruction, has made much progress.

In the colleges and professional schools there is an advance of the standard of admission, and in many schools a lengthening of the course. Women are being more generally provided with advantages for superior study, and for preparation for professions if they so desire.

THE CENTENNIAL EXHIBIT.

The withdrawal of the articles exhibited by the several bureaus of the department in the government building at Philadelphia was delayed by executive order, with a view to anticipate Congressional action in reference to the establishment of a national museum. Congress, however, took no action, so that articles by further executive order have been returned to the care of the several offices by which they were exhibited, or have been stored for future exhibition.

It is believed that much has been done by the exhibition of this department, and by the distribution of reports, and by the communication of information in other ways to inform our own citizens and persons resident in foreign countries respecting the patents of inventions, the public lands, the Indian tribes, the geology and geography of the Territories, the education of our country, and its progressive increase in territory, population, industry, and wealth.

From the Centennial Commission the following certificates of award have been already received:

"The Department of the Interior, Washington, D. C.," for "Collector exhibit."

"The Department of the Interior," for "Statistical maps."

"The Bureau of Education," for "Collective exhibit embracing objects representative of the various classes included in Group XXVIII."

"The United States Geographical and Geological Survey of the Territories," "First Division," for "Geographical and geological maps, models, and photographs."

"The United States Geographical and Geological Survey of the Territories, First Division," for "Models of caves, and cliff-dwellings, and pottery."

"The United States Geographical and Geological Survey of the Territories, Second Division," for "Geographical and geological maps, models, and photographs."

Also, an award "to the United States Geographical and Geological Survey of the Territories" (without further specifications) for "Geological maps, models, and photographs."

The lack of funds has not permitted the preparation and publication of catalogues and reports of the department exhibition, as contemplated by the executive board.

GEOLOGICAL AND GEOGRAPHICAL SURVEY.

FIRST DIVISION.

On the completion of the survey of Colorado last year, it was determined by the department that the work of the United States Geological and Geographical Survey of the Territories, under the direction of Prof. F. V. Hayden, should be transferred to Wyoming and Idaho. The belt of country including the Pacific Railroad having been explored and mapped in detail by the survey of the fortieth parallel, it was deemed best to commence at the northern line of that work and continue westward from the longitude of Fort Steele, Wyoming Territory, to that of Ogden, Utah, or, more precisely, from longitude 107° to 112° and northward to the Yellowstone National Park.

The survey proper the past season was divided into six parties, one of which was devoted to the primary triangulation, three to topographical and geological work, one for critical paleontological study, and one for making level-connections. There were also three smaller parties, devoted to special investigations in different portions of the West.

The primary triangulation party took the field from Rawlins Springs, Wyo. From that point a base-line was measured with great accuracy, from which a network of triangles was expanded over the country to the North and West, locating, at intervals of from twenty to thirty miles, prominent peaks, upon which stone monuments were erected. Upon these points was based the system of secondary triangulation. The primary system was extended with great care over an area of twenty-five thousand square miles, establishing twenty-six main stations.

The three well-equipped topographical and geological parties surveyed

an area of twenty-eight thousand square miles. In accordance with instructions from this department, stone monuments were built at all the important geodetic stations for the use of the surveyors of the public lands under the Commissioner of the General Land Office. The entire number thus erected was two hundred and twenty-five.

As soon as the topographical work is sufficiently advanced, a chart will be prepared showing the location of all the monuments in relation to such of the public lands as are suitable for arable purposes. Very careful attention was given to the study and classification of all areas suitable for arable, pastoral, or mining purposes, and materials were secured for a detailed economic map of the area surveyed, showing the different classes of land by a series of colors. Much attention was given to the measurement of the volume of water in the more important streams for the purposes of irrigation, also to the accumulation of water in reservoirs and the sinking of artesian wells. The possible methods for the redemption of what are called the "barren lands" were examined with great care.

A party was organized during the past season for the purpose of making a critical study of doubtful points in the geological structure of the Rocky Mountain region, and the results have been of the most gratifying character. Numerous facts were obtained which confirmed, in a remarkably clear manner, the statements that had already been made by the chief geologist, that while certain of the grand divisions or groups of strata possessed each certain peculiar characteristics and are recognizable with satisfactory distinctness as general divisions, they really constitute a continuous series of strata with no well-defined planes of demarkation, stratigraphical or paleontological.

A very large collection of fossils, as shells, fishes, insects, plants, &c., were obtained, many of which are new to science. These collections constitute valuable standards for reference in the discussion of the various questions that must arise in the preparation of the geological reports.

One interesting feature of the work of the survey during the past season was the careful examination of the probable ancient outlet of the great lake that filled the Salt Lake Basin. It is probable that the waters flowed northward by way of Marsh Creek into the Portneuf, thence into the great Shoshone or Snake River, and thence into the Columbia River. The source of Marsh Creek is in the lowest pass between the drainage of the Great Basin and that of Snake River.

The publications of the survey during the past year have been quite voluminous, consisting of over 6,000 pages octavo and 2,000 pages quarto, with a great number of illustrations.

Those volumes which are in an advanced state of preparation are two quarto volumes on the vertebrate fossils of the West, one on the fossil insects, and one upon the Rhizopods, certain forms of microscopic life that have had greater influence in building up the crust of the earth

than all other forms, whether animal or vegetable. These volumes will prove not only of scientific but also of great practical importance.

The atlas of Colorado, which was described in the last annual report, will be completed about February, 1878. The tenth and eleventh annual reports of the survey are in an advanced state of preparation and will be printed and ready for distribution before the close of the present session of Congress.

In 1872, the organization of the survey was matured on a basis of an appropriation of \$75,000, with \$20,000 for engraving of charts and illustrations for reports. This estimate was granted until within the past two years, when the appropriations for engraving have been omitted. The consequence is, that the preparation and publication of the more important works of the survey have been greatly impeded. The estimate for the fiscal year ending June 30, 1879, is the same, and it has been made to meet only the absolute needs of the organization and preserve it from disintegration.

SECOND DIVISION.

Major Powell reports that on the arrival of the parties from the field in January, 1877, office-work was organized and pushed with all possible vigor through the winter and early spring. During this time the computations and adjustments for the triangulation were completed, with the determination of the necessary azimuths, latitudes, and longitudes; the hypsometric computations were also made. With the progress of the mathematical work, the topographers were engaged in the preparation of the maps, and by the close of the office-season the whole was put in readiness for the engraver.

During the same time a report on the geology of the Henry Mountains was prepared with stereograms, diagrams, and other illustrations, and the manuscript was sent to the Public Printer; it is now ready for the binder.

A second report was prepared on the geology of the volcanic plateaus of Utah, but it was not deemed wise to publish it until the region had been more fully investigated.

During this office-season the ethnologic work was more thoroughly organized, and the aid of a large number of volunteer assistants living throughout the country was secured.

On this subject, one volume entitled "Contributions to North American Ethnology, vol. I," was published. It relates to the tribes of Alaska, and to the tribes of a part of Washington Territory and a part of Oregon, and is accompanied by maps of those districts, showing the locality of the tribes. A second volume relating to the tribes of California has been printed and is ready for the binder. This is also accompanied by a map.

A third volume on this subject is in course of preparation.

A small volume, entitled "Introduction to the Study of Indian Lan-

guages," has also been prepared and published. This book is intended for distribution among collectors. A tentative classification of the linguistic families of the Indians of the United States has been made; this has been a work of great labor.

About the middle of May the surveying corps took the field. Five parties were organized: one to extend the triangulation, two for topographic purposes, one geological, and one for the classification of lands. Several minor parties were also organized. Some of these parties are still in the field. The region surveyed this year has been entirely within the Territory of Utah. The geographic parties have completed the survey of districts 86 and 75. The geological party has completed the survey of the volcanic plateaus above mentioned, and the party engaged in the classification of lands has extended its survey over the whole of the Territory of Utah except a small portion in the southwestern corner, and over about one-fourth of the Territory of Arizona. The computations for Utah are not yet completed; but it may be stated as a close approximation, that the area which can be redeemed by irrigation through the utilization of all the streams, but without the construction of reservoirs, is about 1,250,000 acres.

The surveys this year have been extended over large areas of ponderosa pine timber, the geographical distribution of which has been carefully determined.

Extensive and valuable coal-fields are embraced in the survey, and they have received much study.

ROCKY MOUNTAIN LOCUSTS.

Under act of Congress approved March 3, 1877, a commission was authorized to report upon the depredations of the Rocky Mountain locusts in the Western States and Territories, and the best practicable method of preventing their recurrence or guarding against their invasions.

The following gentlemen, well known for their scientific attainments, were appointed on the commission:

Prof. C. V. Riley, of Missouri.

Prof. Cyrus Thomas, of Illinois.

Prof. A. S. Packard, of Massachusetts.

The commissioners began their work in April, very soon after their appointment. Several thousand circulars were sent to persons in the locust area, and two bulletins in pamphlet form were issued, one containing full information regarding the preventive measures and direct remedies against the young locusts, for immediate use by farmers; the second bulletin contained an account of the habits of the locust, with many illustrations.

The locust area between longitude 94° and 120° was subdivided into three districts, one of which was assigned to each member, who at least once, and in some cases several times, visited important points

where the locusts were most numerous. A number of paid assistants were employed, reports from whom are in the hands of the commissioners. Professor Riley, besides visiting Texas, Missouri, Kansas, and Colorado several times, also visited the Manitoba region, in British America. Professor Thomas visited Iowa, Nebraska, and Minnesota. Dr. Packard late in May and during June passed through Montana and Dakota, and was enabled to obtain such information as to enable the commission to predict that there would be no invasion of the Mississippi Valley this summer—a prediction which subsequent events fully confirmed. He was also in Utah and Nevada at the time when the people were suffering from the locusts, and afterward made a journey through Northern California, Eastern Oregon, and Washington Territory, so as to ascertain the western limits of the Rocky Mountain locust, which was found to be the 120th meridian. He also determined the species which has for two centuries past locally ravaged Oregon and California.

It is believed that the diffusion of useful knowledge, the personal aid rendered by the commissioners and their assistants, has already saved to the West many times the amount of the funds appropriated by Congress, while the survey that has been made of the locust-area, the study of the migrations, habits, parasites, and means of prevention, has laid the way for future investigations which will eventuate in the abatement of the evil.

HOT SPRINGS COMMISSION.

Under the provisions of the act creating the Hot Springs commission, the following gentlemen were appointed commissioners to survey, lay out, and appraise the value of the lands on the Hot Springs reservation, and to adjudicate the claims of the occupants, &c.: Hon. A. H. Cragin, of New Hampshire; Hon. John Coburn, of Indiana; and Ex-Governor M. L. Stearns, of Florida. The commissioners have prosecuted the work with energy; and although it was found more difficult than at first anticipated, its progress toward early completion has been very satisfactory.

The prosecution of the surveys has required much care and skill; the nature of the land, its heavy growth of timber, its rough and rocky ridges, and the obliteration of old lines and corners making the establishment of new lines a work of extreme difficulty.

The following results have been secured up to the present time:

1. The exterior lines of the reservation have been definitely determined, measured, and monuments set at each section and quarter-section corner.
2. General subdivision lines, dividing the whole area into squares of approximate 2,600 feet to the side, have been run and accurately measured for future base-lines.
3. A portion, including .265 acres, has had its exterior lines run and

measured, and has been accepted as the "Hot Spring Mountain reservation."

4. All claims upon the entire reservation, which had any improvements upon them, have been surveyed to the number of 813, and areas computed of same.

5. Some five miles of base-lines have been run through the principal streets.

6. The topography, upon plan of 10-foot contours, with primes over valuable ground, has been carried over three-fifths of the reservation, and is being finished over the remainder of the territory.

There remains yet to be done, completion of the topography, platting of the same, and study thereof and determination of plan for streets, avenues, &c., and consequent thereon, a proper division into lots, blocks, &c., and thereafter the practical laying down of this plan upon the ground.

The commissioners report that the number of claims for the right to purchase land and for the value of condemned property will exceed one thousand. Much of the testimony relating to this branch of the work has been taken. The labor of preparing these cases for final examination will, in some cases, be very great, as every conflicting interest must be examined and passed upon. It is estimated that the expense of this work will exceed the original appropriation by at least \$20,000.

On the 8th September, 1877, General B. F. Kelly, of West Virginia, was appointed superintendent of the reservation, and soon after receiving full instructions entered upon his duties. No report has yet been received from him on which to base an estimate of the expenses of his office and the probable revenues to meet them.

PAGOSA HOT SPRINGS OF COLORADO.

In view of the action by Congress vesting in the United States the title to and control of the Hot Springs in Arkansas, and believing that medicinal springs should, wherever possible, be placed beyond the cupidity of speculators so that rich and poor can alike share their benefits, I had the honor to recommend in May last the reservation of one mile square of land having the Pagosa Springs as its center. An executive order was issued to that effect.

These springs are situate near the banks of the San Juan River in Colorado, about twenty miles from its southern boundary, and near the one hundred and seventh meridian of longitude west from Greenwich.

DEAF AND DUMB ASYLUM.

One hundred and seven pupils have been under instruction since July 1, 1876. Uninterrupted good health has prevailed in the institution, the only death occurring being a case of accidental drowning.

Two students graduating from the collegiate department received the degree of bachelor of arts, and one the degree of bachelor of philosophy.

The buildings of the institution are within a few weeks of entire completion, and their cost will be within the amount of the estimates and appropriations.

The current expenses of the institution have amounted during the year to \$53,292.31, and there has been expended on buildings the sum of \$39,987.76.

In the estimates submitted, beside the usual amount for current expenses, \$5,000 is asked for furnishing and fitting up the new building, including a small amount for repairs on completed portions of the buildings, and \$10,000 for the inclosure, improvement, and care of the grounds of the institution.

The directors urge that these amounts be appropriated so as to be available during the current fiscal year, since the early completion of the improvements contemplated is very important.

FREEDMEN'S HOSPITAL.

During the year, 763 patients were treated in the hospital and asylum.

Of this number, 500 were admitted during the year, 365 were discharged—265 cured and 100 relieved—and 109 died, leaving 277 patients under treatment in the hospital June 30, 1877. Over three thousand prescriptions were dispensed to the poor, and medicines and medical attendance were furnished from the hospital, when needed, to the inmates of the Colored Orphans' Home—115 in number. Subsistence was provided for 25 of these, who are included in the aggregate number in the hospital.

The proportionately large number of deaths is attributed by the surgeon-in-chief to the character of the cases received, many of them being such as had reached an incurable stage before admission, owing to their want of means to procure proper care and medical treatment, and to the fact that of the 500 admissions, 50 were for treatment for consumption; a disease which almost necessarily proves fatal in this class of patients.

COLUMBIA HOSPITAL FOR WOMEN.

During the year, 627 women were under treatment at this hospital, of which number 240 were in the hospital and 387 received treatment in the dispensary. Five hundred and ninety-one patients were received during the year. Of the whole number treated, 302 were cured, 132 relieved, 3 died, 43 were transferred, and the results of 107 cases are unknown, leaving 40 cases under treatment at the close of the year—24 in the hospital and 16 at the dispensary.

GOVERNMENT HOSPITAL FOR THE INSANE.

During the year ending June 30, 1877, 942 persons were treated in the Government Hospital for the Insane, being an increase over the

previous year of 11. Of this number 83 were discharged recovered, 40 improved, 2 unimproved, and 52 died, making a total by discharges and deaths together of 177. Of this number 140 were males and 37 females.

The number of patients admitted during the year was 198; 147 were males and 51 females; from the Army, 70; from the Navy, 6; and from civil life, 122. There were 10 readmissions and 2 transfers from the private to the indigent list upon the order of the Secretary of the Interior. Of the 755 patients remaining June 30, 1877, 402 were from the Army, 39 from the Navy, and 324 from civil life.

The recoveries during the year were 67 per cent. of the discharges —, 47 per cent. of discharges and deaths together, 42 per cent. of the admissions, and 9 per cent. of the whole number under treatment. The death-rate of males was 62, of females 31, and the average of both sexes 55 in a thousand.

Since the hospital was opened, 4,302 cases have been treated; — of these 95 were re-admissions, making the total number of persons treated 4,207.

The whole number of pay patients treated during the year was 55, — 2 being males and 23 females. The number remaining June 30, 1877, was 30, 15 males and 15 females.

The wholesale market value of the farm and garden products was \$23,992.98. Forage crops to the amount of \$5.533, in estimated value, are not included in valuing the products of farm and garden, having been credited in milk, meats, and the keeping of horses for hospital purposes.

The expenditures for the support of the hospital, including repairs and improvements, amounted to \$166,274.98. The receipts during the year were:

From the Treasurer of the United States	\$150,000	00
From privats patients for board, &c.....	14,576	39
From sundry receipts, including sale of pigs, hides, rags, &c.....	1,593	59
	166,274	98

An average of seven hundred and seventy (770) insane persons, embracing nearly every diversity of mental and bodily, social and official condition have been lodged, clothed, and fed, and received medicinal, hygienic, and moral treatment; the extensive buildings and grounds of the institution protected, repaired when needed, and somewhat improved, and all the furniture and other appliances of the establishment kept in proper and efficient order on an expenditure of less than four and one-half dollars (\$4.50) per week for each person. So large a work, embracing details almost infinite in number and variety, has certainly been cheaply done. Its relations to the work enable the board of visitors to know, and make it becoming in them to declare, that it has been well and therefore creditably done.

On the 30th of June, 1877, Dr. Nichols, under whose management a

supervision the original edifice and subsequent additions were built, offered his resignation as superintendent of the institution. The resignation was accepted, and Dr. Godding appointed to fill the vacancy thus created. He entered upon the discharge of his duties on the 1st of September, 1877.

YELLOWSTONE PARK.

On the 18th of April, 1877, P. W. Norris, of Michigan, was appointed superintendent of the Yellowstone National Park. As no appropriation was made for the payment of a salary to the superintendent, the services rendered by Mr. Norris have been without pay.

By reference to his report it will be seen that he has visited the park and taken such measures toward the protection of its natural curiosities as were deemed practicable.

He recommends adequate appropriation for the following purposes:

First.—Survey with distinct and durable evidence of the boundaries of the park.

Second.—Construction of a plain but substantial wagon-road connecting the two entrances to the park, and the laying out of necessary bridle-paths.

Third.—Salary sufficient to justify a capable and experienced superintendent, and at least one resident assistant, in devoting their time to the improvement and care of the park.

Other recommendations are made by the superintendent, looking to the improvement and protection of the park and its approaches.

Under the act of March 1, 1872, this tract of land was reserved and withdrawn from settlement, occupancy, or sale, and dedicated and set apart as a public park or pleasure ground for the benefit and enjoyment of the people. It was placed under the exclusive control of the Secretary of the Interior, who was authorized to make such regulations as would provide for the preservation from injury or spoliation of all timber, mineral deposits, natural curiosities or wonders within the park, and their retention in their natural condition. It was also left discretionary with the Secretary to grant leases for building purposes, for terms not exceeding ten years, of small parcels of ground at such places in the park as may require the erection of buildings for the accommodation of visitors, the money derived from said leases to be used in the management of the park, and in the construction of roads and bridle-paths within its limits.

Very little has been done toward carrying out the provisions of the act referred to. No appropriation has been made for the pay of a superintendent or the survey of the park, and no revenues have been received, nor have any leases been granted by the department.

Without the necessary appropriation by Congress very little can be done toward making this land of wonders, what it deserves to be on account of its natural formations, one of the most attractive public parks in the world.

CENSUS OFFICE.

The incidental duties of the Census Office, caring for its files, answering inquiries relating to the census, and, whenever required, stating and restating accounts of United States marshals and assistant marshals connected with the taking of the census, have been satisfactorily performed by the chief clerk of the office.

The taking of the census of 1880, for which provision must soon be made, will be the subject of a special communication to Congress.

CAPITOL BUILDING AND GROUNDS.

The Architect reports that the entire building has been kept in good condition, and that new boilers and an elevator have been put in the Senate wing.

He also states that important changes and improvements in the heating and ventilating apparatus of the House wing have been made, as recommended by a commission, consisting of Prof. Joseph Henry; Col. T. L. Casey, Corps of Engineers, United States Army; Mr. F. Schumann, engineer; Surgeon J. S. Billings, United States Army, and the Architect of the Capitol. He states that these improvements have been considered satisfactory, and gives a detailed description of them.

CAPITOL GROUNDS.

The work on these grounds has been carried on under the plans of F. Law Olmsted, landscape architect, and satisfactory progress made.

The principal roadways of the eastern grounds have been paved, and a low granite-wall and coping placed around the northern half of the east park. A screen-wall, with ornamental piers and lamps, has been placed at the circle at the head of Pennsylvania avenue and along First street.

In relation to the proposed new terrace and stairways of approach at the western front, the Architect says: "The rustic terraces at that front have a plain and unfinished appearance, and show clearly the necessity of the proposed terrace-wall in order to connect the grounds with the building in a harmonious manner."

Mr. Olmsted says, on this subject, "that attention should be called to the great defects of the present arrangement for entering the Capitol from the west. The present stairway was designed with reference to the original small central building, and was architecturally inadequate even for that. It now seems as the only direct means of access to the Capitol from all the western part of the city, and is not only awkward and mean in appearance, but exceedingly inconvenient, and rapidly approaching a dangerous condition."

"The obliteration of the central walk and the completion of the entrance to the approach of the Capitol from Pennsylvania avenue

which is designated on a scale corresponding to that of the enlarged Capitol, will make the defects more conspicuous.

"The immediate construction of the new stairways upon the plan favorably reported by the Committees of Public Buildings and Grounds in 1875, is much to be desired."

RECONSTRUCTION OF THE INTERIOR DEPARTMENT BUILDING.

The destructive fire of September 24, by which a portion of the Interior Department building was destroyed, was made the subject of special report, dated October 12, 1877. The measures adopted for the protection of the exposed wings are deemed sufficient to secure the walls from further damage, and to protect the rooms beneath until such time as the reconstruction of the building shall be completed. A substantial temporary roof has been erected, the damaged flues repaired, and the exposed walls covered with brick laid in cement so as to secure them against the action of water and frost. The rooms vacated by the Land Office and Patent Office have been reoccupied, and the business of the department is carried on with but little inconvenience. Aside from the damage to the building, the only material loss reported is that of the models contained in the two wings, and out of what is left of these models it is believed that at least ten thousand can be saved by judicious and skillful treatment.

It is a subject of congratulation that all of the valuable records of the department were preserved, they having been stored in rooms that have proven practically fire-proof.

The prompt reconstruction of the building is a necessity, and I recommend that authority and means be asked from Congress for the prosecution of the work at the earliest practicable moment. In the rebuilding, two essentials, aside from the restoration of the destroyed model-halls, should be provided for. First, the erection of a fire-proof roof over the entire building; second, the creation of more room for the present and future wants of the department.

For many years past the present building has been too small to accommodate the several bureaus of the department. The Pension Office and Bureau of Education have long occupied quarters rented from private parties, and the Indian Office has recently been crowded out on account of the fire and the demand for room to accommodate the bureaus that remain. The taking of the census and the preservation of its bulky records require room impossible for the department to furnish without hiring from private individuals suitable buildings for the purpose. This condition of affairs is against public economy and injurious to the public service. In the reconstruction of the building, it is deemed feasible to so enlarge its capacity as to provide for the bureaus of the department. Whether the accomplishment of this end will be best promoted by the erection of a building across the court-yard, or by other

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means, must of necessity be left to the skilled architect to decide. As means to secure the completest success in the reconstruction of the building, I would recommend that the Secretary of the Interior be authorized to invite competition in the submission of plans for the new structure, and to appoint a commission of three practical men skilled in the art of building to determine upon the best plan submitted.

I am, sir, very respectfully, your obedient servant,

C. SCHURZ,
Secretary of the Interior.

The PRESIDENT.



ANNUAL REPORT

OF THE

SECRETARY OF THE INTERIOR

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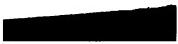
OPERATIONS OF THE DEPARTMENT

FOR

THE YEAR ENDED JUNE 30, 1878.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1878.



R E P O R T
OF
T H E S E C R E T A R Y O F T H E I N T E R I O R .

D E P A R T M E N T O F T H E I N T E R I O R ,
Washington, November 1, 1878.

SIR: I have the honor to submit the following summary of the operations of this department during the past year, together with such suggestions as seem to me worthy of consideration:

I N D I A N A F F A I R S .

The report of the Commissioner of Indian Affairs is herewith submitted.

In my last annual report I sketched a plan of an "Indian policy," the principal points of which were the following:

1. The permanent location of the Indians on a smaller number of reservations containing a fair proportion of arable and pasture lands.
2. Encouragement of agricultural and pastoral pursuits by the furnishing of agricultural implements and domestic animals, and proper instructions by practical farmers.
3. The gradual allotment of small tracts of land to the heads of families, to be held in severalty under proper restrictions.
4. The discouragement of hunting, proper restrictions as to the possession of arms and ammunition by Indians, and a gradual exchange of ponies for cattle.
5. The extension of the laws of the United States over Indian reservations, to be enforced by proper tribunals, and the organization of an Indian police.
6. The labor of white men on Indian reservations as much as possible to be dispensed with, and proper discrimination to be made in the distribution of supplies and annuity goods and the granting of favors between Indians who work and those who live as idle vagabonds.
7. The establishment of schools for the instruction of Indian children in the English language, the elementary branches of knowledge, and especially in practical work.
8. Sufficient provision for the wants of the Indians until they become self-supporting.

This plan, put forth without any pretension to novelty, seemed to meet with general approval, as far as public opinion expressed itself,

and I firmly believe that its execution, if properly aided by Congress and not interfered with by the white population of the Western States and Territories, would, in the course of time, bring forth satisfactory results.

Considerable progress has been made in the execution of the plan above stated, as far as it depends on the action of this department and the officers under its direction. The consolidation of a number of agencies has been undertaken, with a view to a better location of the Indians, which will at the same time simplify the service, render a more efficient supervision possible, reduce the expenses of the government, and lessen the opportunities for fraud and peculation. As far as the appropriations made by Congress would permit, agricultural implements and domestic cattle have been furnished to Indian tribes, to set the Indians to work for their own support and to encourage industrious habits. An Indian police has been organized at twenty-two agencies, and from all of them favorable reports as to the working of the new system have been received. The labor of white men on Indian reservations has as much as possible been supplanted by Indian labor. Instructions have been given to discriminate in the distribution of supplies and annuities, which are not actual necessities, against individual Indians who show no disposition to work, thus discouraging idleness. Permission to send out hunting parties has been given only where without hunting the Indians would have been exposed to want. The rapid disappearance of game, however, in many parts of the western country will very soon stop this source of sustenance. The allotment of land among Indians on several reservations has been ordered and is in progress. The facilities of education have been extended as much as possible, and proper directions have been given for the instruction of Indian children in practical pursuits. Fifty Indian children, boys and girls, selected from different tribes, have been taken to the Hampton Normal and Agricultural Institute in Virginia, where they will receive an elementary English education and thorough practical instruction in farming and other useful work, to be sent back to their tribes after the completed course. Captain Pratt, who was intrusted with the selection of these children, and who performed his task in a very satisfactory manner, reports that a continually increasing interest in education is shown by the Indians, and that they would have sent thousands of children with him had he been able to receive them. The result of this interesting experiment, if favorable, may be destined to become an important factor in the advancement of civilization among the Indians.

The Indian service has been reorganized in several of its branches. It was found necessary to remove a number of agents on account of improper practices or lack of business efficiency, and great care has been taken in filling their places with new men. Where mistakes were found to have been made in the new selections they have been promptly rectified. Important changes have been made in the contract system and in

the methods of accountability; an active supervision has been exercised by inspectors and special agents; the detection of fraud has been followed by vigorous prosecution; and, on the whole, I feel enabled to say that the character of the service has been raised in point of integrity and efficiency.

I am, however, far from pretending that the present condition of Indian affairs is what it ought to be. The experience gained in an earnest effort to overcome difficulties and to correct abuses has enabled me to appreciate more clearly the task still to be accomplished. In my last annual report I stated frankly, and I have to repeat now, that, in pursuing a policy ever so wise and with a machinery ever so efficient, gradual improvement can be effected only by patient, energetic, and well-directed work in detail. An entirely satisfactory state of things can be brought about only under circumstances which are not and cannot be under the control of the Indian service alone. If the recurrence of trouble and disturbance is to be avoided, the appropriations made by Congress for the support of Indians who are not self-supporting must be liberal enough to be sufficient for that purpose, and they must be made early enough in the year to render the purchase and delivery of new supplies possible before the old supplies are exhausted.

2. The Indian service should have at its disposal a sufficient fund to be used, with proper accountability, at discretion in unforeseen emergencies.

3. The citizens of Western States and Territories must be made to understand that, if the Indians are to cease to be troublesome paupers and vagabonds, and are to become orderly and self-supporting, they must have lands fit for agriculture and pasturage; that on such lands they must be permitted to remain and to establish permanent homes, and that such a result cannot be attained if the white people insist upon taking from them, by force or trickery, every acre of ground that is good for anything.

The first two things can be accomplished by appropriate action on the part of Congress. The difficulties growing out of the continually-repeated encroachments by white people on the rights of the Indians may be lessened by the concentration of the Indians on a smaller number of reservations, but they can be entirely avoided even then only by the most energetic enforcement of the laws on the part of the general and local governments.

To this end it seems desirable that the southwestern tribes, whose present reservations appear insecure or otherwise unsuitable for their permanent settlement, should be gradually removed to the Indian Territory. The climate of the Indian Territory is congenial to them, while it has proved unwholesome to the northern Indians who were located there. The northwestern tribes will, in the course of time, have to be concentrated in similar manner on a few reservations east of the Rocky Mountains and on the Pacific slope.

To keep the Indians on their reservations and to prevent disturbance and conflicts, the Commissioner of Indian Affairs recommends the organization of a mounted body of "Indian auxiliaries," to be drawn from the young men of the various tribes, and to be under the command of the military authorities. I heartily concur in this recommendation. The young men enlisted in such an organization, paid by the government, will be withdrawn from the fighting element of the Indian tribes and be disciplined in the service of peace and order. It is a matter of general experience that Indians so employed can be depended upon as to loyal fidelity to the duties assigned to them. But the principal end of our Indian policy cannot be promoted by police measures alone. That end consists in gradually introducing among the Indians the habits and occupations of civilized life, by inducing them to work for their own support, by encouraging the pride of the individual ownership of property, and by educating the young generation; and no efforts should be spared to bring to bear upon them proper moral influences in that direction. Such efforts should not be sneered at as mere sentimental fancies, nor should they be discouraged by the assertion that success is impossible. The advance made by some Indian tribes is sufficient proof that a similar advance may be made by others. Whatever may be accomplished by the employment of force, it is certain that only as the Indians progress in the ways of civilization they will cease to be a troublesome and disturbing element.

I beg leave to submit the following remarks concerning several tribes whose conduct and condition is of especial interest:

THE SIOUX.

In accordance with the agreement made at the council held by the President with the Ogalalla and Brûlé Sioux chiefs in September, 1877, the Red Cloud and Spotted Tail Sioux were permitted to choose locations of their own selection on their great reservation in Dakota. To keep them near the Missouri River would have been convenient for the transportation of supplies and annuities, and, in pursuance of an act of Congress passed at the last session, a commission, consisting of General D. S. Stanley, U. S. A., Mr. J. M. Haworth, and Rev. A. L. Riggs, accompanied by the Commissioner of Indian Affairs, was sent to the camps of the Red Cloud and Spotted Tail Sioux for the purpose of ascertaining whether their choice could not be so directed as to bring their selection of their permanent abodes into accord with the convenience of the government. The Indians, however, were found to be quite determined to move westward, and the promise of the government in that respect was faithfully kept. The Spotted Tail Sioux are now located 65 miles west of the Missouri River, at the mouth of Rosebud Creek, while the Red Cloud Indians settled down still farther west, on White Clay Creek, at the mouth of Wolf Creek.

It gives me pleasure to say that these Sioux so far have given evidence

of a loyal spirit, and that the rumors current for some time of a disposition on their part to break out in hostilities, proved entirely unfounded. When some of the Cheyennes who had escaped from the Indian Territory had taken refuge with Red Cloud, he sent word to the officers of this department that he held prisoners belonging to a tribe friendly to him, but hostile to the government, and that he was ready to give them up, which was faithfully done.

Great difficulty was encountered in sending supplies from the Missouri River to the new agencies. In consequence of a combination of transportation contractors to force the government to pay exorbitant prices, their bids were rejected, and the organization of wagon-trains, to be manned by Indians with their ponies, proceeded with, the same experiment having been tried on a large scale at another agency, at an earlier period this year, and having proved successful. The task to be performed by these wagon-trains between the Missouri River and the Sioux Agencies is a much larger and more difficult one, owing to the character of the country, and the circumstance that the grass has been burnt off the plains between the Missouri River and the new agencies, as rumor has it, by evil-disposed persons to bring about the failure of this experiment; but it has so far been successfully accomplished, and it is believed that the new Sioux Agencies will be sufficiently supplied during the winter season in that way.

The peaceful conduct of the Sioux during this year seems to justify the best hopes for the future.

THE PIMAS AND MARICOPAS.

A striking illustration of the perplexities the Indian service has sometimes to deal with is furnished by the present condition of the Pimas and Maricopas, in Arizona Territory. These tribes, numbering over 10,000, were located on a reservation, part of which was irrigated by the river Gila. Making use of the water of that river, these Indians were enabled to raise crops sufficient for their wants, so that the appropriations made by Congress for their support were very light. It may be said that these tribes were really self-supporting by their own labor and industry. Within a few years past mines were discovered on the upper course of the Gila River, and most of the water which formerly served to irrigate the fields of the Pimas and Maricopas was thus diverted for mining purposes, so that the water-supply no longer sufficed for the irrigation of the Indian lands under cultivation. The consequence was a failure of their crops, and, in fact, the impossibility of raising anything. The Indians found themselves compelled to leave their reservation and to seek new fields on the Salt River, where, however, white people set up claims to the land, and now loudly demand their removal. The result is that these Indians will starve on their reservation or be driven away if they attempt to settle down and cultivate the soil elsewhere, unless the government buys supplies to feed them, which would make

thriftless paupers of industrious and hitherto self-supporting tribes. It is difficult to see how they can be placed in the Territory of Arizona elsewhere, without arousing against them fierce opposition on the part of white people. Inspector Watkins was sent to inquire into their condition, and reports in favor of their removal to the Indian Territory, for which, as he thinks, an appropriation of \$25,000 will be sufficient. I concur in that recommendation.

THE BANNOCKS.

The report of the Commissioner of Indian Affairs gives an elaborate and very interesting account of the outbreak of the Bannocks last spring. It must be admitted that they were insufficiently supplied with food, which, however, was owing to an appropriation of money by Congress utterly inadequate to their wants. Formerly those Indians had supplied themselves in part by hunting, but in consequence of the Nez Perce war they were kept on their reservation, in order to avoid greater disorders. Thus they were deprived of that resource, and the money available for feeding them amounted only to less than 4½ cents a head per day. This created discontent among them; then a murder of a white man was committed by an Indian; the Indian was arrested, tried, and hung; the discontent grew into excitement; a military detachment attempted to disarm and dismount them, but with only partial success; and finally the events took place which appear in the Commissioner's report in a series of dispatches and letters, giving a full and circumstantial account of the causes, progress, and incidents of the trouble. To this account I would respectfully call your attention.

After a protracted pursuit and several encounters, the hostile Bannocks were dispersed, and most of them surrendered and are now held as prisoners. The military authorities have called upon the Interior Department to take them off their hands, and it is intended to transport them to the Yakama Reservation, and to put them under the charge of Mr. Wilbur, the most successful agent in the service.

THE NORTHERN CHEYENNES.

Another disturbance was created by a portion of the band of Northern Cheyennes, who, on the 9th day of September last, suddenly left their reservation, in the immediate vicinity of Fort Reno, in the Indian Territory, and marched northward, through Kansas and Nebraska, toward Dakota, committing many murders and other atrocities on their way. The causes which led to this trouble have been made the subject of special inquiry by the Commissioner of Indian Affairs, and his report is very complete and specific on that subject. It has been stated and widely believed that the Northern Cheyennes were driven to this outbreak by hunger, and that starvation was caused by a neglect on the part of the government officials to furnish them supplies according to treaty. From

the report of the Commissioner of Indian Affairs it appears that they received the same rations which were furnished to the Southern Cheyennes and Arapahoes on the same reservation; that they received those rations with the same regularity; and that their supplies were not only fully up to but rather in excess of the quantity provided by treaty, such quantity being amply sufficient to satisfy their actual wants, and that the only articles withheld from them at any time were flour at two issues only, in consequence of late appropriations, which deficiency was made good by extra beef; and coffee, sugar, and tobacco withheld, according to law, from those who refused to do any work, which law the agent in charge of those Indians properly considered himself bound as much as possible to execute.

It may be added that while a little less than 300 Northern Cheyennes broke out, 4,700 Northern and Southern Cheyennes and Arapahoes remained on the reservation perfectly quiet, having received the same treatment.

The report of the Commissioner also states, as the true cause of the outbreak, that the Northern Cheyennes had, very soon after their arrival on that reservation, shown a spirit of discontent, saying that they came to stay only as long as they liked it; that they insisted upon having their rations issued, not to heads of families, according to law, but to the chiefs of bands in bulk, which the agent very properly refused to do; that differences arose between the discontented element and the rest of the Indians on the reservation, which resulted in bad feeling; and that in consequence of these things finally the outbreak took place.

It has also been said these Indians were furnished with arms by the agent himself, or through his connivance with other evil-disposed persons. The report of the Commissioner states that the arms in the possession of these Indians consisted of about one hundred Springfield carbines taken from General Custer's command, and that with those arms they had a large quantity of ammunition; from which it would appear that the disarming of these Indians before they were located on the reservation near Fort Reno had been very incomplete. While in many other instances Indian outbreaks are traceable to the treatment they receive at the hands of the whites, it appears from the information quoted that in this case the outbreak was owing to the mischievous spirit of bad men among the Indians themselves, and their determination to return northward to their old hunting-grounds.

Nearly all of these runaway Cheyennes have been captured, or have surrendered, and are now held as prisoners by the military authorities. In the interest of general discipline, and in order to show the Indians that nothing can be gained by such disorderly conduct, it is thought best to return them to their reservation in the Indian Territory, after having given the civil authorities of the State of Kansas an opportunity to identify those who committed murders and other crimes while passing through that State, so that they may be dealt with according to law.

THEUTES.

Congress, at its last session, passed an act directing the Secretary of the Interior to appoint a commission to treat with the Utes, in the State of Colorado, for a cession of a large portion of their reservation, and their settlement upon White River, in that State, if such settlement should prove advisable. The commission was to report before final action should be taken. That report has not yet been rendered, but, as I am informed, will be ready for transmission to Congress during the coming session.

PUBLIC LANDS.

The report of the Commissioner of Lands, which I herewith present, gives an abstract of the operations of the General Land Office under the laws relating to the survey and disposal of public lands during the fiscal year ending June 30, 1878.

During the year ending June 30, 1878, public lands were disposed of as follows:

	Acre.
Cash entries	877,555.14
An increase over the previous fiscal year of 136,868.57 acres.	
Homestead entries	4,418,344.92
An increase of 2,240,336.75 acres.	
Timber-culture entries	1,870,434.18
An increase of 1,349,760.79 acres.	
Desert-land entries	310,553.05
This being the first entire year of the operation of the act of March 3, 1877.	
Agricultural-college scrip location	640.00
An decrease of 640 acres.	
Military-warrant locations	84,720.00
An decrease of 12,480 acres.	
State selections approved:	
For school indemnity	50,142.59
For internal improvements	17,420.39
For agricultural colleges	24,097.40
For universities	44,844.43
For salt springs	24,114.56
For public buildings	29,146.33
For penitentiary	25,226.83
	<u>214,992.53</u>
An increase of 59,354.80 acres.	
Scrip locations:	
Sioux half-breeds	1,715.30
Chippewa	8,860.92
Valentine	324.74
	<u>10,900.96</u>
Locations of scrip in lieu of lands embraced in private land-claims....	<u>83,143.66</u>
Approved or patented to States as swamp	<u>202,925.85</u>
An decrease of 211,492.51 acres.	
Certified for railroad purposes	<u>606,340.65</u>
An decrease of 94,451.31 acres.	
Certified for canal purposes	<u>5,628.00</u>
Total	<u>8,686,178.88</u>

A quantity greater by 3,836,411.18 acres than that disposed of the preceding year. This increase is in the homestead entries for actual settlement and for timber culture.

The cash receipts were \$2,022,532.16, an increase of \$569,562.93.

During the year 8,041,011.83 acres were surveyed, making, with the quantity previously surveyed, 724,311,477 acres, and leaving yet to be surveyed 1,090,461,171 acres.

TIMBER LANDS.

In my last annual report I called attention to the necessity of rigorous measures for the suppression of depredations upon the timber lands of the United States. During the past year the employment of special agents for that purpose was continued, and proceedings against depredators instituted, as far as existing laws and the appropriations made by Congress would permit. I regret to say that at times the operations of the department were seriously hampered by the lack of available funds, but appropriations made on April 30 and June 20, 1878, rendered the employment of a larger number of agents possible, as well as the making of surveys in the preparation of evidence to sustain prosecutions. The report of the Commissioner of the General Land Office gives a detailed statement of the settlements made, verdicts obtained, and suits still pending.

It was to be expected that the measures taken by this department for the protection of the public timber lands would meet with stubborn opposition on the part of lumbermen and others directly or indirectly interested in those depredations. Here and there the proceedings of the special agents of the department were complained of as oppressive and otherwise improper, and in every instance careful inquiries into the facts were instituted. Such inquiries resulted almost uniformly in the vindication of the agents employed. When it was found that private property had been seized, together with timber unlawfully taken from the public lands, or with lumber manufactured therefrom—which was sometimes unavoidable—prompt restitution was ordered.

An officer of the Treasury Department, detailed for that purpose, was sent to the State of Louisiana, where charges of improper practices on the part of our timber agent had been preferred with particular urgency. The elaborate report rendered by that officer not only justifies the conduct of the agent of this department employed in that State, who while in the discharge of his duty fell a victim to the yellow fever, but it puts the extent of the depredations committed there and the necessity of their suppression in the clearest light. Complaint was also made that our efforts to arrest the wanton destruction of the forests in some of the mountainous Territories of the Northwest had inflicted great hardship upon the settlers there. But there is information in possession of this department showing that no such hardship resulted from the measures taken; that the price of firewood remained the same; that the settlers

were not hindered in providing for their actual necessities, and that the measures of the department were directed only against a class of persons who made the unlawful taking and selling of timber from the public lands in large quantities a regular business and a source of profit to themselves. In several States, especially in the South, the local authorities were resorted to by interested parties for the purpose of hampering and baffling the efforts of this department by a variety of expedients, in some instances not without effect. In spite of these difficulties it may be said that, in some parts of the country at least, the depredations on the timber lands of the United States have already been greatly limited in extent. But we cannot close our eyes to the fact that anything like complete success in suppressing these unlawful practices is impossible, unless the efforts made by this department for the protection of the public property meet with hearty co-operation on the part of the legislative branch of the government. Actual experience enables me to say that the want of such co-operation has been and will always be an encouragement to the predators to persist in their lawless operations and to defy the authorities.

As to the importance of this subject I shall add but little to what I said in my last annual report. The disastrous consequences which always follow the destruction of the forests of a country are known to every well-informed man. These consequences will inevitably come upon us in a comparatively short period of time, considering the rapidity with which the timber growth of this country is being swept away, unless legislation be adopted systematically to arrest this indiscriminate spoliation. In accordance with the suggestions which, in this respect, I offered in my last annual report, a bill was introduced in the Senate (Senate bill No. 609) which provides that all timber-bearing lands, chiefly valuable for the timber upon them, shall be withdrawn from sale or other disposition under existing laws, and be held by the government with a view to preventing indiscriminate destruction and waste, and to the preservation of the young timber and the reproduction of the forests. The bill further provides ample means by which settlers on the public lands and miners can procure timber and firewood to supply their wants, with or without the soil, at minimum rates. It also provides for the sale of timber at reasonable prices for manufacturing purposes and for export. It finally provides for the appointment of a number of officers to execute its provisions under the direction of this department.

While I have no doubt that this bill may be improved in many respects, I adhere to the opinion that it is practicable and that its enactment into a law and its faithful execution would bring a large revenue into the Treasury, while averting from this country very disastrous experiences and securing great and lasting benefits to our people. This bill was not acted upon at the last session of Congress, and I again invite to it that attention which the importance of this great public interest merits.

While no legislation applicable to all parts of the country with regard

to this subject was had, two bills of a local character were passed, one "authorizing the citizens of Colorado, Nevada, and the Territories to fell and remove timber on the public domain for mining and domestic purposes," and one "for the sale of timber lands in the States of California and Oregon and in Washington Territory."

In the opinion of the Commissioner of the General Land Office, which is on record in this department, these two acts are more calculated to hasten the destruction of the forests in the States and Territories named than to secure the preservation of them. The first above-mentioned act provides in its first section—

That all citizens of the United States and other persons, *bona fide* residents of the State of Colorado or Nevada, or either of the Territories of New Mexico, Arizona, Utah, Wyoming, Dakota, Idaho, or Montana, and all other mineral districts of the United States, shall be, and are hereby, authorized and permitted to fell and remove, for building, agricultural, mining, and other domestic purposes, any timber or other trees growing or being on the public lands, said lands being mineral, and not subject to entry under existing laws of the United States, except for mineral entry, in either of said States, Territories or districts in which such citizens or persons may be at the time *bona fide* residents, subject to such rules and regulations as the Secretary of the Interior may prescribe for the protection of the timber and of the undergrowth growing upon such lands, and for other purposes: *Provided*, That the provisions of this act shall not extend to railroad corporations.

The second section makes it

the duty of the register and receiver of any local land office in whose district any mineral land may be situated, to ascertain from time to time whether any timber is being cut or used upon such lands, except for the purposes authorized by this act, within their respective land districts, and, if so, they shall immediately notify the Commissioner of the General Land Office of that fact.

Of this act the Commissioner of the General Land Office, in a letter addressed to the Secretary of the Interior, expresses the following opinion:

It is a fact well known that while almost all the timber-bearing land in those States and all the Territories, except Dakota and Washington, is regarded as mineral, only a small portion is so in reality. The effect of this bill will, in my opinion, be to prevent the survey and sale of any of the timber lands, or the timber upon the lands, in the States and Territories named, thus cutting off large prospective revenues that might and should be derived from the sale of such lands or the timber upon them. It is equivalent to a donation of all the timber lands to the inhabitants of those States and Territories, which will be found to be the largest donation of the public domain hitherto made by Congress. This bill authorizes the registers and receivers of the land offices in the several districts in which the lands are situated to make investigations without any specific directions from the Secretary of the Interior or the Commissioner of the General Land Office, to settle and adjust their own accounts, and retain from the moneys coming into their hands arising from sales of lands such amounts as they may expend or cause to be expended. This method will be found exceedingly expensive and result in no good. Experience has shown that the machinery of the land offices is wholly inadequate to prevent depredations.

The "Rules and Regulations" issued in pursuance of the first section of this act are to be found in the report of the Commissioner of

the General Land Office, herewith presented. These rules, drawn up "with a view to and the intention of preserving the young timber and undergrowth upon the mineral lands of the United States, and to the end that the mountain sides may not be left denuded and barren of the timber and undergrowth necessary to prevent the precipitation of the rain-fall and melting snows in floods upon the fertile arable lands in the valleys below, thus destroying the agricultural and pasturage interests of the mineral and mountainous portions of the country," make it the duty of registers and receivers to see to it that trespassers upon timber lands, not mineral, be duly reported, that upon mineral lands only timber of a certain size be cut, and that young trees and undergrowth be protected, and that timber be cut only for the purposes mentioned in the act. These "Rules and Regulations" will be enforced with all the power left to this department to that end, in order to save what may be saved. But I deem it my duty to call attention to the fact that, as set forth by the Commissioner in the letter above quoted, the machinery of the land offices is utterly inadequate to accomplish the object in view.

After a careful consideration of the above-named act and its probable effects, I venture the prediction that the permission given the inhabitants of the States and Territories named therein, to take timber from the public lands in any quantity and wherever they can find it, for all purposes except export and sale to railroads, will be taken advantage of, not only by settlers and miners to provide economically for their actual current wants, but by persons who will see in this donation a chance to make money quickly; that it will stimulate a wasteful consumption beyond actual need and lead to wanton destruction; that the machinery left to this department to prevent or repress such waste and destruction through the enforcement of the rules above mentioned will prove entirely inadequate; that as a final result in a few years the mountain sides of those States and Territories will be stripped bare of the timber now growing upon them, with no possibility of its reproduction, the soil being once washed off from the slopes, and that the irreparable destruction of the forests will bring upon those States all the calamities experienced from the same causes in districts in Europe and Asia similarly situated.

It appears to me, therefore, that the repeal of the above-named act, and the substitution therefor of a law embodying a more provident policy, similar to that of the above-mentioned Senate bill No. 609, is in the highest degree desirable. If the destruction of the forests in those States be permitted, the agricultural and pasturage interests in the mountainous regions will inevitably be sacrificed, and the valleys in the course of time become unfit for the habitation of men.

The act for the sale of timber lands in the States of California, Oregon, and Nevada, and in Washington Territory, passed by Congress at its last session, is, in a letter addressed to this department, commented upon

by the Commissioner of the General Land Office in the following language:

It is a bill of local and not general application to the timber lands of the United States, and adds one more to the already numerous special acts for the disposal of the public domain. The price fixed is too low, as much of the land is worth from five to fifty dollars per acre.

Under the provisions of the bill the timber lands will, in my opinion, be speedily taken up and pass into the hands of speculators, notwithstanding the provisions to prevent such result. The soil should not be sold with the timber where the land is not fit for cultivation. Only the timber of a certain size should be sold, and the soil and young timber retained with a view to the reproduction of the forests. The bill should have limited the sale of the lands to persons who have farms and homes within the State or Territory, and it ought to have required the purchasers to show affirmatively that they had need of timber for domestic uses.

The last clause of the second section will permit any person applying for a tract of timber land and securing a certificate from the register, to sell his right and interest therein immediately, and the purchaser, although it may have been obtained by perjury, may be entitled to a patent for the land.

Section 5 provides that any person prosecuted under section 2461 of the Revised Statutes of the United States, may be relieved of the penalty by the payment of two dollars and fifty cents (\$2.50) per acre for the land trespassed upon. This is objectionable, for the reason that the penalty fixed is altogether inadequate, and does not require the payment of costs of prosecution, which are often greater than the penalty to be collected. It should require that the trespasser should pay for the entire subdivision trespassed upon.

There can be no doubt that if this bill becomes a law it will be taken advantage of, by persons who want to make money quickly, to acquire the timber lands under its provisions at a very low price, and strip the mountain sides of their forest growth as rapidly as possible. How disastrous such a result will be to these States and Territories need not be detailed here.

I fully concur with the Commissioner of the General Land Office in his opinion thus expressed.

The traditions of a time are still alive when the area covered with virgin forest in this country was so great that the settler might consider the trees on the land he occupied as a mere difficulty to be overcome and to be swept out of his way. But circumstances have very materially changed. We are now rapidly approaching the day when the forests of this country will no longer be sufficient to supply our home wants, and it is the highest time that the old notion that the timber on the public lands belongs to anybody and everybody, to be cut down and taken off at pleasure, should give way. A provident policy, having our future wants in view, cannot be adopted too soon. Every year lost inflicts upon the economical interests of this country an injury, which in every part of the country will be seriously felt, but in the mountainous regions threatens to become especially disastrous and absolutely irreparable. We ought to learn something from the calamitous experiences of other parts of the world. If the necessity of such a provident policy be not recognized while it is time, the neglect of it will be painfully appreciated when it is too late. I am so deeply impressed with the importance of this subject, that as long as I remain entrusted with my present duties I shall never cease to urge it upon the attention of Congress.

PRIVATE LAND-CLAIMS.

In my last annual report I called your attention to the imperative necessity for some legislation by Congress to provide a way for the more speedy settlement of the private land-claims in the territory (except California) acquired from Mexico by the treaty of Guadalupe Hidalgo in 1848, and the Gadsden treaty of 1853, than is now provided by law. The reasons then given for asking such legislation were:

First. The slow progress made under existing laws in the settlement of said claims.

Second. The large number of claims still remaining unsettled, covering large tracts of land, which interfere with and retard the sale and disposal of the public lands.

Third. The want of harmony between the land system of the United States and the system under which said grants were made, which engenders strife and conflict between the grant claimants and settlers.

To remedy these evils and avert further difficulties, I recommended the passage of an act providing for the appointment of a commission with full power to hear and determine the validity of all such claims within the territory named, subject to an appeal to the United States courts.

No law was enacted by Congress at its last session for the more speedy settlement of said claims, although a bill was introduced in the Senate which, had it been enacted, would, in my opinion, have accomplished the desired object.

All the reasons which existed one year ago, making such legislation necessary, still exist, and the last is intensified by the disorders and bloodshed which have occurred in New Mexico during the last year, most of which are traceable directly to the conflicting interests of grant claimants and settlers.

RAILWAYS.

The following sections were accepted by the President at the dates given, and on the roads specified below:

On the 23d of January last, so much of the fifth section of the Southern Pacific Railroad of California, constructed under the act of March 3, 1871, as lies between the beginning of said section and the point where it crosses the western boundary of Fort Yuma military reservation, California; on the 13th of February, 1878, the tenth section of the main line of said road, 41.66 miles; on the 7th of May, 1878, part of the sixth, all of the seventh, and part of the eighth section of the said road, formerly known as the California and Oregon, now by consolidation part of the Central Pacific Railroad of California; and on the 11th of July, 1878, the seventh, eighth, and ninth sections of the Oregon and California Railroad.

BUREAU OF RAILROAD ACCOUNTS.

The act of Congress approved June 19, 1878, established a Bureau of Railroad Accounts in this department for the purpose of having all matters relating to indebted Pacific Railroad companies, and certain land-grant railroad companies taken cognizance of, examined, investigated, and reported upon. The following abstract of the operations of this bureau since its organization on July 1, 1878, is presented:

The Auditor of Railroad Accounts in making his first annual report states the immediate causes which led to the establishment of the bureau, and gives a review of legislation in regard to reports and investigations of subsidized railroads had and proposed since the incorporation of the Union Pacific Railroad Company in 1862. The government directors of the Union Pacific Railroad Company, in their report for the fiscal year ending June 30, 1877, strongly recommended the establishment of such a bureau in this department. In view of the condition of the affairs of all the Pacific Railroad companies, and the discussions relative to their indebtedness and operations, the recommendation of the government directors met with my full concurrence. The necessity that exists for some officer of the government, specially charged with such duty, to examine the books and accounts of these railroad companies, and to see that the provisions of the act approved May 7, 1878, for the establishment of a sinking fund in the national Treasury to provide for the payment of the indebtedness of the Union Pacific and Central Pacific Railroad Companies to the United States, are properly complied with, is fully confirmed by his report. Other reasons, however, demanded that it be made the duty of some officer of the government to familiarize himself with the affairs of these railroad companies, and to verify the correctness of their reports by personal examination of their books and records. The act of Congress approved June 22, 1874, by which the Secretary of the Treasury is directed to make demand upon the Pacific Railroad companies for the payment of 5 per cent. of their net earnings due and unapplied, made it a necessity that the amount thereof should be properly ascertained. Under the same act the Attorney-General has instituted suits against the Union Pacific Railroad Company and others, which are still undecided; the one, however, against the Union Pacific Railroad Company, involving an amount of nearly \$2,500,000, has reached the Supreme Court of the United States—the lower courts having given judgment in favor of the government, both as to date of completion of the railroad and as to the amount claimed on account of 5 per cent. of net earnings, and as soon as determined further settlements with all of these companies must be made and become the duty of some officer of the government. In this and the other suits of the same kind, the bureau just organized has been and will be able to give its assistance to the Department of Justice. It has also been of some service in the suit of the Atchison, Topeka and

Santa Fé Railroad Company *vs.* The United States, in which questions have arisen involving not only the rights of the United States under the condition attached to the land-grant, but also what constitutes "a fair deduction for the use of a railroad as a public highway by the United States free of toll or other charge," under the recent decision of the Supreme Court.

The gathering of facts and statistics bearing upon the establishment of sinking-funds for the payment of the indebtedness of the Kansas Pacific, Sioux City and Pacific, and the Central Branch Union Pacific Companies, as well as the question of "pro-rate and continuous operation" of the Pacific Railroads, and future questions in regard to cost and other matters which are likely to arise, all of which require special and careful investigation, will be better accomplished, undoubtedly, if intrusted to this bureau, the necessity of which in such regard has been long felt.

The geographical limits named in the act include all subsidized railroads, in whole or in part, west, north, or south of the Missouri River. This construction of the act is objected to by the counsel of some of the land-grant railroad companies.

The land granted by the general government to certain States for railroad purposes was in most cases granted with the condition that the road should be and remain a public highway for the use of the United States, free from toll or other charge for the transportation of any property or troops of the United States. This condition has been decided by the court of last resort to give to the United States only the free use of the roadway, not to include that of the equipment, rolling-stock, &c.; and the court awarded compensation for transportation over these roads subject to a fair deduction for the free use of the roadway under the law. The value of this condition, therefore, under the decision of the court, becomes a question for special inquiry and determination, involving the cost of construction, equipment, and other matters relating to the earnings and operations of a railroad.

Some companies, again, have made answer that their books are not kept in such a way as to enable them to furnish the required information. As to this, it has been, and will be for the future, the desire of this department to cause, if possible, no additional expense or trouble to the companies, so long as the information furnished satisfies the requirements of law, and is sufficient to enable an intelligent opinion to be formed in regard to their condition and operation.

The Union Pacific Railroad Company has rendered reports to the Auditor, under a reservation explained by a letter of the president of the company, a copy of which is given in the appendix to the Auditor's report. One thousand and thirty-eight and sixty-eight one-hundredths miles of this road were subsidized by an issue of bonds, in addition to the land-grant, of which five miles are leased to the Central Pacific Railroad Company and 1,033.68 miles operated by itself. The company owns

178 locomotives, 128 passenger-cars, 41 baggage, mail, and express cars, and 3,357 freight and other cars. The stock subscribed amounts to \$36,783,000; stock issued to \$36,762,300. The par value of shares is \$100. The subsidy bonds amount to \$27,236,512; the funded debt to \$51,116,200; total stock, subsidy bonds, and funded debt is \$115,115,012. Floating debt and interest accrued on subsidy and other bonds to June 30, 1878, amount to \$17,683,394.07; bonds and stocks of and investments in other companies amount to \$4,916,229.77; cash, material, and accounts due amount to \$10,195,160.15. The cost of road, equipment, and Missouri River bridge, as appears on the company's books, is \$120,627,064.69. The earnings for the year ending June 30, 1878, were: From passengers, \$3,259,223.42; from freight, \$7,573,105.21; miscellaneous earnings, \$1,951,812.59; total earnings, \$12,784,141.22. The operating expenses of the road were \$5,803,266.95, and the net earnings, \$6,980,874.27. The interest paid is \$3,402,891.58. The dividends paid amounted to \$2,204,700. Ten million seven hundred and sixty-four thousand nine hundred and forty-seven acres of land granted to this company remain unsold.

The Auditor further states that, under the laws in force to June 30, 1878, there will be retained probably of the amount due the Union Pacific Railroad Company, \$616,066.93, as one-half of the amount due for transportation, and \$352,330.17 as 5 per cent. of net earnings; total, \$968,397.10, applicable on account of subsidy bonds; the remainder of government transportation account for the year payable to the company being \$263,736.76; and the total government transportation being \$1,232,133.86.

If the sinking-fund act had been in force during the last fiscal year there would have been retained, \$616,066.93, one-half of transportation, and \$106,660.49, cash payment on account of 5 per cent. of net earnings; total, \$722,727.42, which, if deducted from the above amount of \$968,397.10, leaves \$245,669.68 as the amount to the disadvantage of the government under the new law, so far as a direct payment for the use of the United States is concerned, although \$616,066.93 being required for the sinking-fund, the total payment by the company becomes more than was required under previous laws by the sum of \$370,397.25.

From the statement of the Auditor it also appears that under the sinking-fund act the net earnings at the disposal of the company for the last fiscal year would have amounted to \$4,016,383.04, and that this sum would have enabled the company to pay interest on all its bonds, land-grant, sinking-fund, and bridge bonds, and dividends on par value of its capital stock of very nearly 6 per cent.

The Central Pacific Railroad Company has not complied with the law requiring reports to be made to the Auditor, and certificates as to their neglect to do so have been submitted to me. A report of this company, under section 20 of the act of 1862, and under the act of June 25, 1868, which have been repealed, was, however, received by this department,

and referred to the Auditor. From this report and other unofficial sources the following facts and figures are compiled: Miles subsidized, 860.66; miles operated, 2,074; number of locomotives, 227; passenger-cars, 235; baggage, mail, and express cars, 49; freight and other cars, 4,913; stock subscribed, \$62,608,800; par value of shares, \$100; stock issued, \$54,275,500; subsidy bonds, \$27,855,680; funded debt, \$55,045,00; floating debt, \$11,534,206.07, not including accrued interest on the subsidy bonds amounting to \$15,225,431.38; total debt, \$109,660,317.45; total stock and debt, \$163,935,817.45. Cost of road equipment and real estate, \$147,000,000; cash, material, sinking-fund accounts, \$7,827,987.33. For the year ending June 30, 1878, passenger earnings were \$5,367,663.20; freight earnings, \$10,160,055.11; no data given or obtainable as to miscellaneous earnings; total earnings, as far as reported, \$15,527,718.31; operating expenses, \$9,988,386.67; net earnings, \$5,539,324.64; interest paid (estimated), \$3,700,000; dividends paid, \$4,342,040; lands unsold, 11,300,000 acres. As there appeared a great discrepancy between the sworn statement of the president of the company as to net earnings given above, and one made up from the figures given in the printed report of the officers of the company to the stockholders, an explanation has been called for by the Auditor. Correspondence in regard to this discrepancy is given in the appendix to the Auditor's report. The facts that the floating debt of this company seems to be increasing over what it ought to be; that for the calendar year 1877 this increase amounted to \$5,310,169.37, and that the directory nevertheless saw fit to pay out over \$4,000,000 in dividends, while the annual interest charge had increased over \$300,000, are reported by the Auditor.

The Kansas Pacific Railway Company have rendered and are rendering reports in conformity with law. On November 3, 1876, Carlos S. Greeley and Henry Villard were appointed receivers of this company and operated the road until removed by the United States circuit court in October, 1878. The Auditor reports the business of this road as rapidly improving; and the following facts and figures are gathered from his report: Miles subsidized, 638.34; miles operated, 672.06; number of locomotives, 89; number of passenger-cars, 51; baggage, mail, and express cars, 17; freight and other cars, 1,323; stock subscribed, \$9,992,500; stock issued, \$9,689,950; subsidy bonds, \$6,303,000; funded debt, \$22,180,600; floating debt, \$4,755,010.22, not including \$1,915,356.94 accrued interest on subsidy bonds; total debt, \$35,153,967.16; total stock and debt, \$44,843,917.16; cost of road, \$34,359,540.66. For the year ending June 30, 1878, passenger earnings were \$698,710.45; freight earnings, \$2,348,388.86; miscellaneous earnings, \$252,938.50; total earnings, \$3,300,037.81; operating expenses, \$2,125,832.80; net earnings, \$1,174,205.01; interest paid, \$613,316.32; lands unsold, 4,803,933 acres.

The Denver Pacific Railway and Telegraph Company and the receiv-

ers who have operated this road since April 2, 1878, have rendered the reports required from them. This company has suffered a considerable decrease in its gross earnings, in consequence of the opening of the Colorado Central, a branch of the Union Pacific Railroad. The following facts are reported: Miles subsidized, 105.89; miles operated, 105.89; number of locomotives, 6; passenger-cars, 4; baggage, mail, and express cars, 4; freight and other cars, 32; stock subscribed, \$4,000,000; stock issued, \$4,000,000; funded debt, \$2,350,000; floating debt, \$189,382.65; total debt, \$2,539,382.65; total stock and debt, \$6,539,382.65; cost of road, \$6,495,350. For the year ending December 31, 1877, passenger earnings were \$106,633.32; freight earnings, \$161,950.38; miscellaneous earnings, \$33,262.61; total earnings, \$244,727.97; operating expenses, \$141,093.74; net earnings, \$103,634.23; interest paid, \$111,167.87; lands unsold, 950,000 acres. Complete reports as to operations and affairs for the fiscal year ending June 30, 1878, were not received in time for this report.

The Central Branch Union Pacific Railroad Company has signified its intention to render reports. The following is from unofficial sources: Miles subsidized, 100; miles operated, 100; number of locomotives, 6; passenger-cars, 6; baggage, mail, and express cars, 3; freight and other cars, 127; stock subscribed, \$1,000,000; par value of shares, \$100; stock issued, \$980,600; subsidy bonds, \$1,600,000; funded debt, \$1,600,000; floating debt, including \$1,000,000 accrued interest on subsidy bonds, is \$1,567,800; total debt, \$4,767,800; total stock and debt, \$5,748,400; cost of road, \$2,548,707.36, to which should be added the discount on bonds and stock issued. For the year ending June 30, 1877, passenger earnings were \$40,409.87; freight earnings, \$130,819.27; miscellaneous earnings, \$25,815.12; total earnings, \$197,044.26; operating expenses, \$153,206.88; net earnings, \$43,837.38; interest paid, \$45,344.73; lands unsold, 116,165 acres. These figures differ somewhat from those given in the last annual report of the department. Business operations for year ending June 30, 1878, were not reported in time to be embodied in the Auditor's annual report.

The Sioux City and Pacific Railroad Company has fully and promptly complied with every requirement of the law. The statement as to this road shows: Number of miles subsidized, 101.77; miles operated, 106.82; number of locomotives, 13; passenger-cars, 9; baggage, mail, and express cars, 6; freight and other cars, 218; stock subscribed, \$4,478,500; par value of shares, \$100; preferred stock issued, \$169,000, drawing 7 per cent. interest per annum, secured by mortgage on the Missouri Valley connection; other stock issued, \$1,899,400; subsidy bonds, \$1,628,320; funded debt, \$1,628,000; floating debt, \$30,000, not including over \$900,000 accrued interest on subsidy bonds; total debt, \$4,186,720; total stock and debt, \$6,255,120; cost of road, \$5,337,627.41. For June 30, 1878, passenger earnings were \$83,600.83; freight earnings, \$197,309.18; miscellaneous earnings, \$89,755.35; total earnings, \$370,-

665.36; operating expenses, \$330,475.22; net earnings, \$40,190.14; interest paid, \$11,654.50.

The Texas and Pacific Railway Company rendered its customary report to the department on October 5, 1878, which was referred to the Auditor. This officer called for explanations as to the report, so as to bring the information therein contained within the requirements of the act of 1871, and repeated his requests for reports under the act of June 19, 1878. These explanations, it is understood, will be furnished by the company, but it has so far declined to report under the act of June 19, 1878. From the report and other unofficial sources the following is compiled for the year ending June 30, 1878: Miles subsidized, 443.86; miles operated, 443.86; number of locomotives, 49; passenger-cars, 32; baggage, mail, and express cars, 11; freight and other cars, 986; par value of shares, \$100; stock issued, \$7,018,500; funded debt, \$18,488,000; floating debt, \$1,255,113.60; total debt, \$19,743,113.60; total stock and debt, \$26,761,613.60; cost of road, \$26,540,239.61; passenger earnings, \$594,030.84; freight earnings, \$1,644,753.03; miscellaneous earnings, \$77,787.88; total earnings, \$2,316,571.75; operating expenses, \$1,448,329.66; net earnings, \$868,242.09; interest paid, \$659,461.89; granted lands unsold, 18,000,000 acres.

The Southern Pacific Railroad Company has referred the law and the requirements made under it by the Auditor to its law officers and has not made any report. The following facts and figures have been compiled from unofficial sources for the year ending June 30, 1877: Miles subsidized, 711.95; miles operated, 711.95; number of locomotives, 43; passenger-cars, 69; baggage, mail, and express cars, 10; freight and other cars, 1,024; stock subscribed, \$38,122,000; par value of shares, \$100; stock issued, \$36,763,900; funded debt, \$29,300,000; floating debt, \$994,861.03; total debt, \$30,294,861.03; total stock and debt, \$67,058,761.03; cost of road, \$66,495,837.04; passenger earnings, \$598,529.49; freight earnings, \$654,303.78; miscellaneous earnings, \$2,300,171.29; total earnings, \$3,553,004.56; operating expenses, \$1,724,174.41; net earnings, \$1,828,830.15; interest paid, \$1,817,449.50; lands unsold, 12,061,206 acres.

The Northern Pacific Railroad Company has made full and acceptable reports. The following facts are shown: For the year ending June 30, 1878, miles subsidized estimated at 2,000; miles operated, 555; number of locomotives, 48; passenger-cars, 22; baggage, mail, and express cars, 24; freight and other cars, 1,196; stock authorized, \$100,000,000; par value of shares, \$100; stock issued, \$68,438,543.11; floating debt, \$320,125.50; total stock and debt, \$68,758,668.61; cost of road, \$20,872,051.58; passenger earnings, \$318,745.82; freight earnings, \$745,517.28; miscellaneous earnings, \$80,502.61; total earnings, \$1,144,765.71; operating expenses, \$608,788.99; net earnings, \$535,976.72; lands unsold, 45,000,000 acres.

The Saint Louis and San Francisco Railway Company of Missouri,

purchaser of the Missouri portion of the Atlantic and Pacific Railroad, and successor of that company, has complied with the law and rendered reports. The following is compiled therefrom for the year ending December 31, 1877: Miles subsidized, 292.50; miles operated, 363.50; number of locomotives, 28; passenger-cars, 10; baggage, mail, and express cars, 8; freight and other cars, 738; par value of shares, \$100; stock issued, \$21,289,608; funded debt, \$5,278,982.26; floating debt, \$49,612; total debt, \$5,328.594.26; total stock and debt, \$26,618,202.26; cost of road, \$26,734,718.15; passenger earnings, \$230,242.57; freight earnings, \$1,023,909.89; miscellaneous earnings, \$69,791.30; total earnings, \$1,323,943.76; operating expenses, \$584,816.91; net earnings, \$739,126.85; interest paid, \$734,740.91, annual interest payment being \$549,340 in gold; lands unsold, 915,654 acres.

The Burlington and Missouri River Railroad Company in Nebraska at first complied with the requirements of the law, but, acting under legal advice, the president of this company referred further requests to the directors for a final decision.

The Oregon and California Railroad Company has complied with the law and rendered reports accordingly. The following facts are shown for the year ending June 30, 1878: Miles subsidized, estimated at 300; miles operated, 200; number of locomotives, 14; passenger cars, 11; baggage, mail, and express cars, 3; freight and other cars, 227; par value of shares, \$100; stock issued, \$20,000,000; funded debt, \$10,950,000; floating debt, \$800,000; total debt, \$11,750,000; total stock and debt, \$31,750,000; cost of road, \$5,422,958.32; passenger earnings, \$227,524.15; freight earnings, \$402,286.07; miscellaneous earnings, \$37,381.18; total earnings, \$667,191.40; operating expenses, \$396,000; net earnings, \$271,191.40; interest paid, \$158,775; lands unsold, 3,000,000 acres.

The Oregon Central Railroad Company has rendered reports to the Auditor. For the year ending June 30, 1878, the following is reported: Miles subsidized, 47.50; miles operated, 47.50; locomotives, 4; passenger cars, 2; baggage, mail, and express cars, 2; freight and other cars, 62; stock subscribed, \$5,000,000; par value of shares, \$100; stock issued, \$4,980,050; funded debt, first-mortgage bonds, \$4,695,000, issued and delivered to trustees as security for \$1,000,000 borrowed money; floating debt, \$1,182,507.58, including \$1,000,000 secured by first-mortgage bonds; total debt, \$5,877,507.58; total stock and debt, \$10,857,557.58; cost of road, \$1,201,927.97; passenger earnings, \$25,337.05; freight earnings, \$44,532.27; miscellaneous earnings, \$2,397.07; total earnings, \$72,266.39; operating expenses estimated at \$72,266.39; interest paid, \$98,000; lands unsold, 1,200,000 acres.

Of the railroad companies which have received grants of land from the United States through State or Territorial governments, the following have not rendered reports by reason of interruption of business during the past four months in consequence of the prevalence of yellow fever in the Southwestern States, viz: The Memphis and Little Rock

Railroad Company, the Vicksburgh, Shreveport and Texas Railroad Company, the managers of Morgan's Louisiana and Texas Railroad and Steamship Company.

The following have complied in a measure with the requests of the Auditor, viz: The Hannibal and Saint Joseph Railroad Company, the Leavenworth, Lawrence and Galveston Railroad Company, the Missouri River, Fort Scott and Gulf Railroad Company, the North Wisconsin Railroad Company, the Winona and Saint Peter Railroad Company, the Southern Minnesota Railway Company, and the Saint Paul and Duluth Railroad Company.

The following railroad companies are preparing to comply with the requests of the Auditor, viz: The Little Rock and Fort Smith Railway Company, the Memphis and Little Rock Railroad Company, the Atchison, Topeka and Santa Fé Railroad Company, the Chicago, Rock Island and Pacific Railroad Company, and the Missouri Pacific Railroad Company.

Four months only having elapsed since the establishment of the bureau, most of which time has been consumed in organizing and in correspondence with railroad companies, it became questionable whether any report of its operations could be made at so early a day, and in consequence it is necessarily incomplete.

The Auditor's report is accompanied by an appendix, containing statements and compilations of facts relating to the Pacific and land-grant railroad companies, the laws affecting them, official correspondence, statements of the affairs of the companies, their receipts, expenditures, and operations, the accounts between the United States and the Pacific Railroad companies, the condition of the respective land-grants, and other matters of general interest in respect to railroad companies.

It will be seen from Appendix C of the Auditor's report, that about 196,424,800.68 acres of land have been granted for railroad purposes, of which, to June 30, 1878, 31,014,496.7 acres were patented. The acts of Congress making these large grants were passed with conditions intended, in a measure, to repay the people for such valuable donations; but, until the passage of the act creating the Bureau of the Auditor of Railroad Accounts, the government had no certain way of ascertaining whether these conditions were complied with, nor was it possible to know what they were worth.

The recommendations of the Auditor in regard to legislation are worthy of consideration.

THE PRO-RATE QUESTION.

The suit of the Kansas Pacific Railway Company *et al. vs. The Union Pacific Railroad Company*, instituted January 21, 1875, in the United States circuit court of the district of Nebraska, commonly known as "the pro-rate case," has not been determined. In view of this fact, and the fact that legislation bearing upon this question is now pending in Con-

ress, and that much complaint continues to be made against the Union Pacific Railroad Company for non-compliance with the requirements of law in this respect, it is hoped that the whole subject will receive early consideration by Congress, so that some final settlement of these difficulties may be had.

THE GOVERNMENT DIRECTORS.

The report of the government directors of the Union Pacific Railroad company has not yet been received, but it is understood that it will be shortly made, and will be laid before Congress during the present session.

PENSIONS.

The number of unsettled pension claims of all classes at the beginning of the year was 91,444, of which 49,369 were original Army invalid claims, 5,610 invalid increase; 32,969 original widows, dependent relations, and minors, 907 widows increase; 1,053 original Navy invalid, 65 invalid increase; 485 original widows, dependent relations, and minors, widow increase; 448 survivors War of 1812, and 537 widows.

During the year there were 67,218 new pension claims of all classes filed, of which 18,812 were original Army invalid, 21,915 invalid increase; 1,661 original widows, dependent relations, and minors, 516 widows increase; 300 original Navy invalid, 182 invalid increase; 131 original widows, dependent relations, and minors, 14 widows increase; 2,789 survivors War of 1812, and 15,898 widows. There were filed in addition 91 claims for bounty land warrants. Besides these, 5,095 claims of the several classes which had been rejected were reopened for further consideration.

Of the new claims, 18,240 were under the act of March 9, 1878.

During the year, 43,370 pension claims of the various classes and 394 claims for bounty land warrants were settled.

The whole number of unsettled pension claims at the close of the year was 120,387.

As shown by an actual count in all the agencies, there were at the beginning of the year 226,643 pensioners on the rolls. At the close of the year there were on the rolls 223,998 pensioners, a decrease of 2,645.

Owing to the large number of 1812 claims, which will be settled within the year, it is probable that there will be a considerable increase in the number of pensioners during the current year.

The amount appropriated for pensions for the year ending June 30, 1878, exclusive of surgeons' fees and the salaries and fees of the agents for paying pensions, was \$27,850,000, of which \$26,530,792.10 were disbursed for pensions, leaving unexpended \$1,319,207.90.

For a more particular statistical account of the transactions of the Pension Bureau, reference is made to the Commissioner's annual report.

The special service division of the office investigated during the year 830 cases, resulting in a total saving to the government, by dropping

from the rolls the names of those not entitled to receive pensions, the rejection of cases presented in proper form but found to be without merit, the reduction of pensions already granted, and the refunding of money improperly collected by pensioners, with one year's pension added in each case, of \$402,096.95.

The total cost of the investigations to the fund appropriated for the expenses of the special service was \$38,235.80

In referring to this special work of his office the Commissioner says:

Considering the extraordinary opportunities for the successful prosecution of fraudulent or unmeritorious claims which exist under the present system of adjudication, in connection with the fact that the Commissioner of Pensions has no authority to go out and hunt for fraud, but is limited by the statute to the investigation of such cases only as suspicion attaches to in the usual routine of the office, the investigations of the last year, as well as those of the preceding year, furnish a very suggestive lesson. I am convinced that a great number of persons have been pensioned who had no just title, and that the number of that class is being constantly increased in the settlements which are now going on, and this must continue to be the case until some measure shall be adopted by which the truth of the parol testimony which is offered can be tested. No such test is possible under the present system.

The annual expenditure of so large an amount of public money should certainly have thrown about it all the safeguards that are attainable by improved methods of settlement and payment. The greatest care should be taken to establish beyond doubt the right of a claimant to pension money; for, once allowed, it becomes through a long series of years an annual tax upon the government.

The results of investigation into a limited number of claims which have attracted suspicion appear to justify the conclusion arrived at by the Commissioner, that the present system of examining the evidence on which pension is allowed is defective and ought to be corrected.

In two previous annual reports the Commissioner recommended the substitution of a corps of efficient surgeons, to be assigned by districts throughout the country and assisted by competent clerks, for the present unwieldy and unreliable system of medical examination, which requires the services of over 1,500 examining surgeons.

By the system proposed, the claimants and their witnesses would be brought face to face with the officers of the government, a more accurate knowledge would be received by the facts set forth, and more reliable data than can be now obtained would be secured for the settlement of claims. In his present report he states that another year's observation and experience have only tended to confirm his previous opinion that the change of system proposed is necessary and that it is both feasible and economical.

The magnitude of the interests involved commends this proposed system to the considerate attention of Congress. If on examination it is found to be an improvement on the present one, no time should be lost in securing the legislation necessary to the change.

The consolidation of pension agencies, which went into effect July 1,

gress, and that much complaint continues to be made against the Union Pacific Railroad Company for non-compliance with the requirements of law in this respect, it is hoped that the whole subject will receive early consideration by Congress, so that some final settlement of these difficulties may be had.

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The special service division of the office investigated during the year 1,830 cases, resulting in a total saving to the government, by dropping

Patents granted, including reissues and designs, 14,100 ; trade-marks registered, 1,505 ; labels registered, 492 ; forfeited for non-payment of final fee after allowance, 668.

The total receipts from all sources \$734,887.98, an increase over last year of \$19,923.25. Total expenditures, including \$50,000 for repair of models, \$665,906.02 ; leaving an excess of receipts over expenditures of \$68,981.96.

The treaty between the United States and Great Britain for the reciprocal protection of the marks of manufacture and trade in the two countries, proclaimed by the President July 17, 1878, has already produced good results, mutually advantageous to the citizens of both nations.

During the year duplicate copies of all British patents have been received. The contribution is a valuable one, especially to the examining corps of the office.

The Commissioner reports the restoration of 18,563 models damaged by the fire of September, 1877. A careful record has been kept of the repaired models, showing the condition of each when taken up for repair.

The work has been skillfully done and reflects credit on those employed.

The necessity of additional room is daily growing more apparent. The various divisions are suffering from this cause, some of them lacking the proper space for the desk-room needed for the transaction of business. The continued accumulation of applications, works of reference, copies of drawings and specifications, models, &c., will in the near future crowd the working force out of the building, unless relief is found by providing the additional room needed.

Previous recommendations are renewed by the Commissioner for liberal appropriations for the purchase of books of reference for the library and for the preparation of complete digests of United States patents. As the office yields a handsome revenue over and above all its expenditures, it would appear but simple justice to the inventors who contribute to this revenue that a portion of the surplus should be yearly appropriated for the improvement of its scientific library and for the preparation of such digests of patents as will facilitate the work of examination and make its results more accurate and valuable.

EDUCATION.

The Commissioner of Education reports increased attention to the collection of statistics and increased use by the public of the facts thus collected. He states that the small force of his office has been unequal to the performance of its regular current business, and that he has been compelled to delay special reports or set them aside for the time.

A special report is being prepared on Indian education from the sixteenth century to the present time.

The amount of lands and money hitherto granted by the general government to the several States for the benefit of education, and the amount

realized by each State from its educational land grants, have formed the subject of another report now in hand.

The preparation of the report on industrial and high art education in the United States, including the subject of drawing in the public schools, the history and present condition of all public art educational institutions in the United States, as well as of all public art collections, is substantially ready for the press.

The Commissioner alludes to the interruption of work caused by the recent removal of his office to new quarters, but observes that the rooms now assigned, though inadequate, afford some additional advantages, especially as they allow him to bring the collection illustrating the condition, progress, methods, and appliances of education belonging to his office into close proximity to its library. The benefits to accrue from a national collection illustrating the improvements in these appliances can hardly be overestimated. The valuable library has now more commodious quarters. Since its removal, the books, numbering 10,000 volumes, and nearly the entire collection of pamphlets, numbering 25,000 (with 10,000 duplicates), have been re-examined, classified and arranged, and rendered convenient for use.

During the year the office has issued Circular of Information No 1, 1878, a pamphlet of thirty-six pages, relating to the training of teachers in Germany; Circular No. 2, 1878, relating to education in London, is now in press. The special articles which appeared in the education report for 1876 has been reprinted, in order to supply many requests for them.

The office has sent about 20,000 communications and 15,000 packages of documents; it has received about 24,000 communications and 6,000 packages of documents.

The tendency to modify instruction so as to connect with it industrial training has increased, and several special schools for this purpose have been established. The colleges of agriculture and the mechanic arts have supplied successfully many wants of this kind.

The pecuniary embarrassment of the country has continued to reduce the amount of money expended for school purposes. Reduced salaries in some places have, in the opinion of the Commissioner, had the effect of increasing the number of incompetent teachers, and in many communities the total lack of funds has caused the schools to be closed.

The friends of educational progress both in France and this country looked forward with interest to the International Exposition at Paris; and particularly so, because education was made so prominent a part of the scheme. Dr. John D. Philbrick, of Boston, was requested to take charge of the educational section of the American exhibit, and the Bureau of Education afforded him all the assistance it could. The result of the exposition has been very gratifying. Although the section of education occupied a space of only 550 square feet, the number of premiums awarded to the exhibitors was 121—about one-sixth of the whole

number awarded to exhibitors of the United States; and of these, 27 were gold medals, three of which were awarded to the Bureau of Education. The Commissioner reports that the Government of France has established in the ministry of public instruction a bureau similar in its objects to the United States Bureau of Education, and that the federal government of Switzerland proposes to do the same.

The pleasant intercourse of the office with foreign educators continues. Many important letters have been received and answered. Forty-five foreign periodicals are examined regularly, and important works and reports on education in all the languages of Western Europe are procured as soon as possible, are carefully read, and the most valuable parts are translated or summarized.

Officers in charge of school systems and schools in the regions lately afflicted by the yellow fever report that it has been impossible to give instruction up to the present time; that the orphan asylums are overcrowded, and that there are many destitute children left parentless by the fever, for whom no provision has been made as yet. Correspondence has been had through the office with a view to a partial relief by their reception into institutions for destitute children in other parts of the country which may be so situated as to be able to receive them.

The Commissioner urgently renew his recommendation that appropriations be made sufficient to do the work of the office with reasonable facility, and that Congress devise some plan for the aid of education throughout the country.

CENSUS.

The near approach of the tenth census renders it important that the question of a new census law should be considered by Congress at its next session. If the additional legislation which seems to be required to secure statistical results commensurate with the expense of enumeration be put over to the first regular session of the Forty-sixth Congress, it must suffer from inadequate consideration and hasty action, while the postponement of the initial preparations to so late a date will inevitably enhance the cost of the census and impair the value of the returns.

A work of such extent and complexity, the administrative machinery of which has to be built up for the occasion wholly from the ground, whose agents, or the greater part of them, can, from the nature of the case, have had no experience of such duties, should be carefully planned; every arrangement should be made considerately; every appointment should be thoroughly canvassed; every spot where exceptional liability to failure or error exists should be known and covered by special provisions; and the central statistical office should stand organized and ready to take up the returns as fast as they come in, to sift and sort them with intelligence and without delay, and to digest, compile, and publish them in the briefest time compatible with accuracy. All this can be fully and satisfactorily done only in case

ample time is allowed, after the passage of the act, before the commencement of the enumeration. If the department is to remain uncertain whether the census is to be taken under the act of 1850 or under a new law till the February of the census year—as was the case in 1870—the work must suffer both through enhanced cost and through impaired value.

As to the considerations which seem to demand new legislation, in the interest alike of economy and of the improvement of the statistical results, I respectfully refer to the report of the Superintendent of Census, which is annexed hereto.

The law of May 23, 1850, was passed in the very infancy of statistical science. In the period that has intervened the demands of Congress and the country for statistical information have greatly increased, and new schedules and new inquiries are needed to satisfy those demands.

Better methods of enumeration have become known, through our own experience at three censuses taken under the act of 1850, and through the experiences of other nations in conducting similar services. Even the conditions of the country have greatly changed. While our population was more easily classified in 1850, it now contains elements which vastly increase the labor of enumeration and multiply the liabilities to error. Large numbers of immigrants have been added to our population on the one hand, and five millions of freedmen, who were formerly reported at the census promptly and intelligently by their masters, are now left to speak for themselves under the gravest disadvantages. The very conditions of life among our people have undergone great changes. The interior movements of population have become more rapid and extensive, and half a million of square miles are now settled more or less densely, which in 1850 were unsurveyed, or even unexplored.

As the census of a great nation is a very practical work, into which theory and preconceived notions should enter as little as possible, it would seem that such great changes of condition, as well as the advances made meanwhile in the science of legislation and in the art of government, justify and require a new census law.

The duties of the Census Office, such as the correspondence supplying information asked for, and care of records and documents, have been satisfactorily performed during the year by the clerk in charge. No settlements have been made of the unpaid claims of the assistant marshals at the eighth and ninth censuses owing to the failure of Congress to provide for their payment.

It is to be hoped that such provision will be made at the coming session, in accordance with the recommendation of the department.

GEOLOGICAL AND GEOGRAPHICAL SURVEY.

During the past season the work of the United States Geological and Geographical Survey, under the direction of Prof. F. V. Hayden, was continued northward into portions of Wyoming and Montana Territories.

The usual appropriation for the survey was not passed by Congress until July, rendering the field season very short, yet the results were of considerable magnitude and of much importance.

The survey proper was divided into four parties, one of which was devoted to the extension of the primary triangulation to the northward, two were engaged in topographic and geologic work, and the fourth performed photographic and special geologic duty. All the parties left the Union Pacific Railroad from Point of Rocks and Green River Stations about July 25, and proceeded northward toward the Yellowstone National Park. To the second division was assigned the duty of making an exhaustive survey of the park and its surroundings, and to the third the exploration of the Wind River Range and the Snake River country. The primary triangulation was extended over about twelve thousand square miles. Eight primary stations were occupied, among them Wind River, Fremont's and Grand Teton Peaks, which are among the most difficult and hazardous of ascent on the continent. This division would have performed double this amount of work had a band of hostile Indians not robbed it of its entire outfit about the middle of the season.

The second division made a very detailed survey of the National Park, securing the materials for the preparation of a topographical and geological map on a scale of one mile to one inch. The geologist not only studied the geology minutely, but also sketched every square mile of the area. An unusually interesting and valuable collection of volcanic rocks and hot-spring specimens was obtained. The entire collections of the survey, which are of a varied character, will amount to about three tons weight.

The third division explored with equal care the Wind River and Teton Ranges of mountains, a region of which comparatively little was previously known. The peak named by the survey Fremont's Peak was found to be over 14,000 feet in height above the sea, with no trace that any human being had ever previously reached its summit. Three complete glaciers were discovered on the east side of the Wind River Mountains, the first ever known to exist east of the Pacific coast. The old glaciated rocks and morainal deposits were found on a remarkably grand scale in both the Wind River and Teton Ranges.

The object of again surveying the Yellowstone Park was to bring it under the system of triangulation which had been employed with so much success in Colorado and to make the entire work uniform. All the old hot-spring basins were resurveyed in great detail, and several new ones were discovered and mapped. Soundings and temperatures of several thousand hot springs were taken. The history and habits of the geysers were carefully studied.

The photographer of the survey obtained over fifty fine views of the bowls and other curious ornamental details of the Hot Springs.

The results of the season's labors, though a short one, have been on

he whole very satisfactory. About 12,000 square miles of very difficult country were surveyed, much of it in minute detail, and a mass of observation secured for the twelfth annual report, which will make it of more general interest and value than any of the preceding.

The district assigned to this survey by this department for the next Atlas comprises all the area of the Territories of the United States north of latitude $41^{\circ} 45'$, east of meridian 117° and west of meridian 94° . It is estimated that the mapping of this area will occupy five years more, and when this is completed, the survey will have mapped over one-fourth the territory of the United States west of the one hundredth meridian.

GEOGRAPHICAL AND GEOLOGICAL SURVEY OF THE ROCKY MOUNTAIN REGION.

Major Powell reports that early in July the parties of this survey again took the field. A new base-line has been measured at Kanab, in Southern Utah, on ground better adapted to the requirements of the trigonometric operations than the one formerly established in that vicinity. This line has been connected with the one previously measured at Gunnison by a complete chain of triangles having artificial points. Thus a geodetic basis has been given to the whole geographic work south of the 40th parallel sufficiently refined for all the purposes for which the survey is made.

The topographic and geologic work has been prosecuted south and east of the Colorado River. District 106 has been completed and much work done in district 105. The topographic methods employed were essentially the same as those of the previous season, that is, the plane-table and orograph were used in conjunction, the results of each being complementary to the other.

The hypsometric work rests on the base at Kanab, which had been previously established by long series of barometric observations.

The region surveyed embraces the elevated plateaus south of the Grand Cañon of the Colorado, and the plateaus and desert valleys stretching to the eastward. Very little irrigable land has been found, less than one-fourth of one per cent., as the tributaries of the Colorado are all very small and the great river itself runs at a profound depth below the general surface of the country, so that it cannot be used. Extensive and valuable grazing lands are included in the survey and some valuable forests of pine, spruce, and fir, the extent and characteristics of which have been carefully determined.

As the work has progressed from year to year it has been found that important economic questions relating to the future industries of the far West demanded more thorough investigation. The mineral resources, the extent, and practicability of the irrigable lands, pasture lands, and timber lands have been regarded as questions of prime importance, and the researches of the survey have been more and more directed to their solution.

For accurate knowledge and clearly defined statements relating thereto, it was found that the geographic work must be improved, and this has been done by using instruments of greater precision and methods of greater refinement.

The geology of the country has proved to be of much interest. The great faults north of the Colorado have been traced southward, and extensive volcanic formations in that region have been studied.

A relief map and a stereogram of the high plateaus of Utah have been constructed for the purpose of a more thorough discussion and illustration of the geologic structure of the district. By these, three important purposes are served. The great accumulation of facts derived from the elaborate system of mensuration used in the geographic work are made available for the determination of geologic structure, the exaggeration and distortion which too often characterize the results of research in this department of investigation are avoided; and the stereogram affords a method of graphically presenting a multiplicity of facts and details that in the texts but serve to obscure the more salient features. Both of these methods have been previously employed in the work with satisfactory results.

Ethnologic researches have been continued among the Utes, Shoshonis, Gosiats, Poncas, Omahas, Iowas, Dakotas, and many other tribes, and much material has been collected relating to their languages, social and governmental institutions, mythology, customs, habits, &c.

During the year the office has been engaged in the construction of a map of the United States, intended to represent the distribution of the various tribes of Indians when they were first discovered by Europeans. This map is near completion and will accompany a report on the classification of the North American Indians, by linguistic affinities, now in course of preparation. Much progress has been made in the preparation of a bibliography of North American linguistics, which will constitute an appendix to the same report.

During the past year the office work has been vigorously prosecuted, and charts, on a scale of four miles to the inch, delineating the geography of the entire region previously embraced in the survey have been completed. The engraving of these charts is rapidly progressing. The drainage and contour lines are finished and the rock and hill work is now in progress. This engraving has been done on copper plates in order that the maps might be put in permanent form for the use of the government in time to come, as well as for the purpose of illustrating the reports of the survey itself. Thus the results of the work will have enduring value.

During the year the following reports have been prepared: Report on the arid lands of the United States, 4^o, printed; report on the high plateaus of Utah, 4^o; report on the geology of the Black Hills, 4^o; report on the Indians of Oregon and Washington Territory, 4^o.

Much has been done toward the preparation of subsequent reports on

geology and ethnology. Thus it will appear that valuable contributions have been made to geography, geology, and ethnology. In botany and zoology no work has been done.

ENTOMOLOGICAL COMMISSION.

The United States Entomological Commission, attached to the United States Geological and Geographical Survey of the Territories, has issued its first report on the Rocky Mountain locust, or destructive grasshopper of the West, a volume of some 700 pages, fully illustrated with maps, plates, and wood-cuts.

The favorable predictions made by the commission last winter had an encouraging effect, and stimulated the immigration to the country of late years ravaged by locusts. The statement which a full survey of the field enabled the commission to make in advance, viz, that there would be no serious injury in 1878, has been fully verified. The commissioners have continued their labors during the past summer, confining their attention to that northwestern portion of the country which they have designated as the Permanent Region, the object being to gather further knowledge of that region, with a view of preventing the ravages of the Rocky Mountain locust therein and its migration therefrom.

The problem of destroying the young insects as they hatch out in the more fertile country in the Southeast is virtually solved in the report which the commission has already issued, and the task which they now undertake is to endeavor to prevent the migration of the winged insects from the Permanent Region into the more thickly settled country.

An appropriation of \$25,000 was asked of the last Congress for the completion of the work mapped out, and \$10,000 were appropriated, and this only toward the end of the fiscal year. The commissioners ask for the additional sum of \$15,000, in order that they may be able to continue their investigation until the practical work is accomplished. It was too late in the season when the last appropriation was obtained to permit the completion of the work this year, but with such means as they have husbanded added to the additional appropriation asked for, and with promised assistance by the Dominion authorities, they will be enabled, by getting into the field early the coming spring, to complete fully the work assigned to them.

HOT SPRINGS COMMISSION.

It is greatly regretted that the act for the continuation of the Hot Springs Commission which passed both Houses at the last session of Congress failed to receive the President's signature because of an omission in engrossing the bill. The portion of the bill incorporated in the engrossed copy is practically inoperative, being strangely mixed with a provision directing the National Academy of Sciences to report to Congress the most practicable plan for surveying and mapping the Territories of the United States, and also the most suitable plan for the publication

and distribution of the reports, maps, and documents, and other results of said surveys. As a complete suspension of the work already done by the commission would have been followed by serious embarrassment of the interests of a large population as well as those of the government, I requested—by direction of the President under date of June 25, 1878—the late commissioners to take charge of the records of the proceedings had before them while acting as a commission, and to perform such work as would facilitate the early adjudication of the claims, expressing the hope that Congress at its next session would adopt such legislation as might be needed to confirm the acts done, and provide for a due compensation for their services. The late commissioners complied with the request, had the records of the commission and all the testimony and other papers brought to Washington, and, as will be seen by reference to their report, have rendered valuable service which will greatly facilitate the final adjudication of the cases, when empowered by the law to act. Stenographic notes not before written out, amounting to about 3,000 pages of foolscap, have been transcribed and properly briefed and filed. Careful consideration and much study have been given to the subjects of laying out, widening, and straightening streets, and such other duties have been performed as could be, properly, under the letter of instructions. They have devoted their time and money to the service of the government, and although no legal obligation has been incurred to repay them, yet, under the circumstances, I feel warranted in earnestly recommending that the expenses incurred by them while acting, and pay, at the rate formerly given, be allowed them for the time they have served.

The Hot Springs Reservation contains about 2,565 acres. The Hot Springs Mountain, containing about 265 acres, from whence the supply of water is received, has been set apart as a permanent reservation, to be owned and held by the United States; this will leave about 2,300 acres to be disposed of under the provisions of the act of March 3, 1877.

Before the expiration of their term of office, the commissioners had closed the work of taking testimony from the claimants in interest. More than six months were occupied in this; 2,750 witnesses were examined in 897 cases. The oral testimony and documentary evidence are reported to be equal to 25,000 pages of legal cap. Accurate surveys have been made of the entire tract; boundaries have been re-established, and permanent monuments erected on the exterior and section lines and corners. Monuments have also been set at each angle of the permanent reservation. Claims of individuals have been surveyed and platted on sixteen large maps, representing the quarter-sections. A topographical survey has been made of the entire reservation, and three maps prepared and photolithographed—one topographical map, one claim map, and the third combining the two.

From this it will be seen that the work left unfinished by reason of the clerical omission in the enrollment of the sundry civil bill is of vital importance, not only to the citizens of Hot Springs, but to the govern-

ment itself. It is earnestly urged that the act be renewed as soon as possible upon the reassembling of Congress, to the end that all pending claims may be adjudicated, and improvements completed, as contemplated by the act of March 3, 1877.

The commissioners report the following work remaining unfinished:

First. Straightening and widening old streets; laying out new streets, avenues, and alleys in the town of Hot Springs.

Second. Hearing of arguments in contested claims, and the final adjudication in 897 cases.

Third. The appraisal of each lot awarded.

Fourth. Resurvey of each lot after adjudication of the claims, in order to define the lines and ascertain the exact amount of ground to be certified to each claimant as required by the law.

Fifth. The appraisal of improvements upon each lot awarded.

Sixth. The division of the land not claimed or awarded into lots, squares, or blocks, and appraisal of the same.

Seventh. Preparing and issuing certificates to each claimant who is adjudged the right to purchase, being evidence of claimants on which to base patent.

Eighth. Condemnation and appraisal of all buildings on permanent reservation and issuing certificates therefor.

Ninth. Preparation of a map embodying the results of the whole work to be filed with the Secretary of the Interior, accompanied by the schedule provided for by law.

The superintendent of the Hot Springs Reservation reports that during the year he has had removed from the permanent reservation some three or four hundred people encamped thereon. The erection of comfortable barracks and suitable pools for their use, and the expenses of the removal, were provided for by private contributions. The reservation is now practically free from all nuisances. Reference is made in the report to the destructive fire which destroyed a large portion of the town of Hot Springs, and to the means employed to prevent the introduction of yellow fever. For the year ending June 30, 1878, the total amount collected for water-rent was \$5,260.

Recommendation is made that the present rental of \$5 a month for each tub in use be maintained in the future.

YELLOWSTONE PARK.

The superintendent of the Yellowstone Park reports the construction of about sixty miles of wagon-road within the park during the present season. Although the work was somewhat retarded by the presence of hostile Indians, it was accomplished without loss of life or property. He refers to complications likely to arise with parties who claim to have made improvements within the park, and suggests the early consideration of the questions involved.

For the protection of the park and for the continuation of improvements during the next fiscal year, he recommends the appropriation of \$25,000.

CAPITOL BUILDING AND GROUNDS.

The Architect of the Capitol reports the completion of the improvements in the heating and ventilating apparatus of the House. The commission, appointed by the House of Representatives having been continued, will give further consideration to this important subject with a view of remedying existing defects. Attention is called to the insecure condition of the wall, ceiling, and roof of the old Hall of Representatives, and the combustible material of which they are composed. The Architect says, "The construction of this portion of the building is such that, should a fire take place in any of the rooms adjoining the wall, it would in all probability ascend to the roof." He recommends that all the wooden construction be taken out and fire-proof material substituted. The mere mention of a liability of destruction by fire should be sufficient to secure a thorough investigation of this and other portions of the building, with a view to guarding against even the possibility of such an occurrence.

The attention of Congress is called to the necessity of providing suitable quarters for the store-yards and workshops connected with the Capitol. As the ones now in use are rented, and notice to vacate may at any time be received, it would appear to be both a precautionary and economical measure for the government to provide quarters of its own. Suitable lots can be secured adjoining the government property, on Delaware avenue, near C street north, on which are situated the Senate stables and fire-engine house.

The improvement of the Capitol grounds has steadily progressed during the year, in accordance with the plans proposed. The roadways, footwalks, and walls appear to be constructed in a substantial manner and of durable material. The stone work around the Naval monument has been completed, the only work remaining to be done being the introduction of water and the erection of the bronze figures and lamps.

The purchase by the government of the property on Pennsylvania and Maryland avenues at their junction with First street west, enables the architect to complete the proposed circle according to the original design. It is recommended that a more suitable dwelling-house be erected for the superintendent of the Botanical Garden, the house now occupied being on damp ground and unfit for a healthy residence. The architect reports considerable damage to the bases of the columns of the east portico by reason of the meetings held there from time to time. The material of which the columns are made is a soft sandstone, easily defaced by the feet. He recommends that the practice of holding meetings at this place be forbidden.

The expenditures on account of the Capitol extension for the year ending June 30, 1878, were \$64,000. Improvement of grounds,

\$138,762.24. For ventilation of House of Representatives, \$22,970.70. For lighting Capitol and grounds, and other expenses connected therewith, \$31,048.95.

CONGRESSIONAL LIBRARY.

In compliance with instructions from Congress authorizing the Secretary of the Interior to ascertain as near as may be what would be the probable cost, either through direct purchase from the owner or condemnation for public use, of land adjoining the Capitol grounds on the north, east, and south sides, to the extent required for a proper site for the Congressional Library, and to report to Congress the desired information, I have had prepared plats of the several squares located on the north, east, and south sides of the Capitol, and a full report, as near as could be ascertained, of the area of each lot, its present owner, the assessed valuation of last year, also that of the present year, and the price at which the same can be purchased. The report, together with accompanying papers, will be laid before Congress on the first day of the session as required by law.

PURCHASE OF PROPERTY AT THE INTERSECTION OF MARYLAND AND PENNSYLVANIA AVENUES AND FIRST STREET WEST.

By a provision of the act making appropriations for sundry civil expenses of the government for the year ending June 30, 1879, and for other purposes, the Secretary of the Interior was directed to purchase portions of lots numbered 1, 2, 3, 4, and 5, in square 575, and a portion of lot 9, in square 576, in order to enlarge the circle, and to give proper width to the roadway and sidewalk at the intersection of Maryland and Pennsylvania avenues and First street west.

To carry out the provisions of this law abstracts of the titles of the several lots, portions of which were to be purchased, were prepared by the direction of this department, and were, on the 15th of August, transmitted to the Attorney-General with the request that he would cause to be prepared and presented to the supreme court of the District of Columbia the necessary petition for the appraisement of the several interests of the owners of the real estate, and the improvements thereon, to be taken for the public use. Messrs. William B. Webb, William H. Clagett, B. H. Warner, S. T. G. Morsell, and Elias E. White, were appointed by the court to make the appraisements.

The notification required by the law having been given, the commissioners proceeded under oath to perform their duty. They reported to the court that, taking into view all the benefits and advantages arising from the improvement,

Lot 1, in square 575, was damaged to the amount of \$12,000.

Lot 2, in square 575, was damaged to the amount of \$11,000.

Lot 3, in square 575, was damaged to the amount of \$10,500.

Lot 4, in square 575, was damaged to the amount of \$8,500.

Lot 5, in square 575, was damaged to the amount of \$3,000.

Lot 9, in square 576, was damaged to the amount of \$5,233.60.

The report of the commissioners was ratified by the court, no exception thereto having been taken.

No demand having been made upon the Secretary of the Interior for the assessed value of any portion of the property, within fifteen days after the appraisement, the full amount of the assessed values was, in accordance with the law, deposited in the court to the credit of the owners of the lots and improvements. The title to the property is, therefore, now vested in the United States.

The following allowances were made by the court for costs and fees: To the United States district attorney, \$300; to the marshal of the court, \$99; to the clerk, \$22.05; to the National Republican and the Law Reporter, for advertising, \$57.50. The court allowed the commissioners \$200 each for their services. From the order making this allowance an appeal has been taken on the ground that it is excessive.

The department paid to M. Ashford, esq., for making the abstracts of titles, \$220.

GOVERNMENT HOSPITAL FOR THE INSANE.

The twenty-third annual report of the Board of Visitors is one of unusual interest. It is accompanied by tables showing the number of patients treated during the year, also the number treated from the beginning; their sex, nativity, duration of the mental disease of those admitted, also those who died, forms of disease, age of patients when admitted.

The whole number under treatment during the year ending June 30, 1878, was 947; admitted during the year, 182. The number of males was 721; females, 226. Discharged, recovered, 60; improved, 41; unimproved, 7; died, 46.

The average number of patients treated daily during the year was 781, a larger average than ever before recorded. The accommodations are intended for 563 patients, so that the present necessity for more room is both evident and urgent. It is gratifying to note that, in the face of this overcrowded condition of the hospital, the general health of the inmates is excellent, the percentage of death being but 4.85, the lowest, with the exception of a single year, in the history of the institution.

The products of the farm and garden are estimated at \$23,844.83. The total expenditures for the year were \$174,276.52. This includes all the expenses of the hospital and care of grounds and buildings.

The estimates for the year ending June 30, 1880, are as follows:

1st. For the support, clothing, and treatment of the insane, \$179,250.
2d. For general repairs and improvements, \$10,000.

3d. For airing courts for the recreation of the inmates, for the completion of rooms in the upper story of the bakery, for changing roof of

portion of the building, and providing accommodations for employés and for erection of hay barracks, \$10,500.

4th. For a fire-pump and additional pipe and hose, \$3,500.

5th. For reservoirs and filter-beds to provide pure water for the hospital, including pipes and a tank, \$9,500.

6th. For the extension of the accommodations of the hospital by the erection of a building for female patients, \$300,000, one-third of which is asked for expenditure during the next fiscal year.

7th. For the erection of a suitable structure for the immediate relief of 250 patients of the chronic class, \$30,000.

ASYLUM FOR THE DEAF AND DUMB.

The number of pupils remaining in the institution July 1, 1877, was 81; admitted during the year, 15; from July 1, 1878, to November 1, 21; total, 117. Of this number, 103 were males and 14 females.

The sanitary condition of the institution has been excellent, the report showing exemption from disease of any serious nature, with but a single exception.

All the buildings are now completed ; the total expense of completing the college edifice, together with connections with the main building, and the remodeling of the roof of the old edifice, including fixtures of a permanent character, having been \$125,060.64.

The receipts of the institution for the year were \$51,578.06, \$48,000 of which was by appropriation from Congress. The expenditures were \$50,277.03, and of this amount \$28,253.69 were for salaries and wages.

The receipts on account of extension and refitting of buildings were \$72,036.86; expenditures, \$71,996.50.

The estimates for the next fiscal year are, for the support of the institution, including salaries and incidental expenses, \$51,000, and for the erection of a gymnasium, bath-house, and for improvement and inclosure of the grounds, \$15,500.

FREEDMEN'S HOSPITAL.

The whole number of patients in hospital from June 30, 1877, to June 30, 1878, was 807 ; of this number, 530 were admitted during the year. The number remaining in hospital June 30, 1878, was 231.

The Colored Orphans' Home and Asylum, containing 115 children and attendants, has been supplied with medicines and furnished with medical treatment during the year. In the dispensary department 1,083 patients have been treated and about 4,000 prescriptions prepared for their use.

The number of deaths during the year was 118. The average daily cost of supporting a patient, as given in the surgeon's report, is 46 cents.

As the Freedmen's Hospital is the only one in the District, under government control, where all classes of patients can be treated, its usefulness should not be crippled by inadequate appropriations.

COLUMBIA HOSPITAL FOR WOMEN.

The reports from this institution show that during the year the hospital has been free from any of the diseases usually occurring in lying-in asylums, no adult death being recorded in the obstetrical department. Only one death is recorded in the medical and surgical division, although many of the operations performed were regarded as among the most severe and dangerous in surgery.

The number of patients treated in hospital during the year was 294; the daily average was 29.48. The number treated in the dispensary was 485.

THE TERRITORIES.

In response to a letter addressed to the governors of the several Territories, reports relating to their present condition, resources, &c., have been received from Utah, Montana, Idaho, Arizona, and Washington Territories, and will repay careful perusal. Utah is represented as rich in minerals and the precious metals—gold, silver, copper, zinc, iron, coal, sulphur, and salt being found in various parts of the Territory. The lands fitted for agricultural purposes are mostly taken up and are now under cultivation. There are vast tracts of land which might be valuable for cultivation if properly irrigated, but as the water would have to be brought through canals for long distances, the chances of their redemption are remote. The larger portion of the lands of the Territory is represented as of no value except for grazing purposes.

Agricultural pursuits in Utah are followed almost exclusively by Mormons, while the mining enterprises are conducted by the anti-Mormon population. As a rule the farms are small, owing to the expense and difficulty of irrigating the land.

About three-fourths of the population is represented to be foreign born or of foreign-born parentage, representing nearly all the European nations, the Sandwich Islands, and China, while it is claimed from the best attainable information that about nine-tenths of the people are Mormons.

For school purposes the legislature has imposed a direct tax upon all taxable property of three mills on the dollar. Owing to the fact that the schools are controlled by the Mormons and none but Mormon teachers are employed, the Gentiles decline to send their children to the public schools, patronizing instead private institutions conducted under the supervision of the various religious denominations.

The Uintah Indian Reservation is the only one within the Territory. The Indians thereon are represented to be well behaved, many of them having adopted the habits of civilization and have built comfortable houses for their use. They are engaged in cultivating the soil, raising stock, and give promise of being self-sustaining in a few years. The governor ascribes their present condition as due to good management and to the fact that they have been isolated and under no influences other than those of the officers of the agency.

The difficulty of securing conviction in criminal cases is referred to, and, in the opinion of the governor, is due to the defective jury law in force. Certain suggestions are made looking to the proper remedy, which should receive the consideration of Congress.

The governor of Montana gives a glowing account of the present condition of the Territory. Its climate is represented as mild and healthy; its water courses, of purest water, frequent and convenient; its soil rich in all the elements of productiveness; its mines of precious metals rich and profitable, and its educational facilities, considering the means at the disposal of the Territory, equal to those of the most favored State. The average production of wheat to the acre is claimed to be larger than any of the great grain-producing States of the Northwest. Agricultural lands are abundant in all the valleys, and, for fertility, are represented to be unsurpassed. The development of the mineral resources of the Territory is still in its infancy. The absence of railroads makes the transportation of machinery and ores very expensive, and thus retards the growth of one of the leading industries. The product of the gold and silver mines for the present year is estimated at \$7,000,000. The completion of the Utah Northern Railroad, running from Ogden, Utah, to Helena, Mont., and now in course of construction, will lead to a much larger development of the mining interest. Coal abounds in paying quantities, and timber of fair quality and of commercial value is found in nearly all parts of the Territory. Stock-raising is a growing industry, Montana offering advantages possessed by few sections of the country. The grass is abundant and of good quality; the winters mild; the valleys are protected by the high mountains, and water is found where needed. Since the settlement of the Territory the loss of stock from the severity of the winters has not exceeded 3 per cent. per annum. The governor says, "It is believed that the bunch grass is worth more to the Territory than its mines of gold and silver. This peculiar grass starts up early in the spring, reaches maturity in July, and cures where it stands, thus affording a ready supply of food for stock during the autumn and winter months." The exports from the Territory are gold and silver bullion, cattle, wool, robes, hides, and furs. The wool-clip for the year reached 1,000,000 pounds. In speaking of the people of Montana, the governor says, "They are mainly from the Middle and Western States, are energetic, enterprising, intelligent, law-abiding, liberal, and patriotic, and are of the right kind of material to found the leading commonwealth of the great New Northwest."

The present school law provides for the levy of a tax of from three to five mills upon all the taxable property of the counties. The money collected is apportioned among the various school districts by the county superintendents of public instruction, and drawn from the treasury on order of the district trustees, countersigned by the clerk of the district. Each district is empowered to levy special taxes for building school-houses or extending the school term after the public money is exhausted.

One of the most pleasing indications of the prosperous condition of Montana is to be found in her excellent school system and the popular interest manifested in its rapid development. But little benefit has been derived from the provisions of the organic act, which sets apart sections 16 and 36 of each township as a reserve for school purposes. Practically, the law is inoperative at the present time. In referring to this subject the governor says:

Many of these lands are mineral-bearing, and our local land office holds that they may be patented by individuals, and we have recourse only to the location of other lands in lieu of those thus patented. Unfortunately, neither the superintendent of public instruction nor any one else in the Territory has authority of law to thus relocate lands in such emergencies. Immigrants are rapidly securing the best sections, and if this evil is not promptly remedied it will not be long before the lands left us to choose from will be comparatively worthless.

The report concludes with a statement of the present condition of the Indian tribes within the Territory, their relations to the whites, accompanied by suggestions as to their future government, which should receive the candid consideration which their importance demands.

The governor of Idaho reports gold and silver as the leading resources of the Territory; all other industries are subsidiary to the production of the precious metals. The greater portion of the Territory is unfitted for cultivation by reason of the mountains and desert plains, too elevated to admit of irrigation. The valleys where water abounds, or where irrigation can be profitably carried on, produce in rich abundance the cereal grains, vegetables of all kinds, and fruits in their perfection. Beyond producing for home consumption there is but little inducement for agricultural enterprises, the means for transportation being extremely limited.

It is to be regretted that the cause of education receives but indifferent attention. The lands reserved for school purposes are not available as a source of revenue, so that what is done in the educational line depends upon the direct tax collected for that purpose. The Territory has no benevolent or charitable institutions and no asylums for the unfortunate of any class. In referring to the Indian tribes within the Territory the governor says:

Whatever policy may be adopted toward the native tribes, it cannot be concealed that the steady encroachments of the white settlements are rendering their condition distressing and their vicinity more dangerous. Seeing themselves surrounded and circumvented, their hunting-grounds overrun, and their means of subsistence cut off, they become desperate and aggressive and mutual wrongs lead to war.

The governor expresses the opinion that our border population and the Indians cannot dwell near each other in peace under existing relations. He thinks a remedy may be found in the division of Indian lands into homesteads; the breaking up of tribal relations, and the extension over them of the laws of the United States and of the Territories. Reference is made to the extreme difficulty in traveling in the Territory, and an illustration of this is given in the statement that the members of the

general assembly from Lemhi County, about 160 miles in a direct line from the capital, are paid mileage for 1,124 miles each way. They are forced to go through portions of Montana, Wyoming, and Utah, while the members from North Idaho pass through Washington Territory and the State of Oregon, a distance of 610 miles, the direct line being but 130 miles. The suggestion is made that the extra cost for transportation, both for Army and other stores, would build a substantial military road from Fort Boisé to Fort Lapwai. The policy of liberal land-grants to railroads is favored by the governor, who believes that only through such grants the necessary roads can be built. A revision and consolidation of the laws governing the Territories are recommended. There is a necessity for defining more carefully the rights and limitations of local legislation and of holding officers to a stricter accountability.

The governor of Washington Territory presents a report of Territorial prosperity quite as pleasing as that from Montana. The Territory is divided by the Cascade Range of mountains into two nearly equal divisions, known as Eastern and Western Washington, differing in soil, climate, and productions. A large portion of the western division is covered with dense forests of fir trees, averaging in height more than 200 feet. For ship-building this timber is unequaled, and for many years past heavy shipments have been made, not only to cities upon our own coast but to those of England and France. The governor says that—

It has been estimated that the cost of building ships here is 35 per cent. less than the cost at Bath, Me., or at any other Atlantic ship-yard. In the near future ship-building on Puget Sound will constitute one of the most important branches of productive industry in the Territory.

The principal resources of the Territory are coal and lumber, the present annual production of the latter being about 250,000,000 feet. Of this quantity more than 200,000,000 feet are exported to San Francisco, South America, the Sandwich Islands, and other points.

There has been but a partial development of the coal-fields, although coal has been found in nearly every county of Western Washington. The value of the exportations from Western Washington is given at \$5,000,000. While the western division of the Territory cannot properly be classed as agricultural, yet it has an area of at least 5,000 square miles of excellent farming land.

Puget Sound is the attractive feature of the Territory. It extends from the British line in the north and from the Straits of Juan de Fuca on the west to Olympia, in the interior, and has a coast line of 1,594 miles. It can be navigated at all seasons of the year and by all classes of vessels. Severe storms on its waters are unknown. From the Pacific Ocean to Olympia, a distance of more than 200 miles, it is free from bars, shoals, rocks, or other obstructions. The climate of Western Washington is mild, ice and snow being seldom seen. The average winter temperature is 39°, that of summer 63°. The warmest days in summer are accompanied by cool and refreshing nights.

Unlike Western Washington, the eastern division has but little tim-

ber. Its vast rolling prairies make it peculiarly fitted for grazing purposes, and for wheat-growing it has few equals on the continent. It is estimated that its area of wheat-land is sufficient to produce, with ordinary culture, more than 100,000,000 bushels annually. The present yield for the season is estimated at 1,500,000 bushels. All the fruits, except tropical, and all vegetables of superior quality, are grown in great abundance. The soil and climate are well adapted to the production of peaches and grapes. For stock-raising this section of the Territory is unsurpassed, there being an unlimited supply of bunch-grass growing spontaneously over many thousand square miles on Puget Sound. The completion of the canals around the obstructions on the Columbia River will largely reduce the rates of transportation, and give a new impetus to the agricultural interest of Eastern Washington.

In referring to these improvements the governor says :

There is no work of internal improvement now carried on by the government which is of more importance than these canals. When completed there will be uninterrupted steamboat navigation from the wheat-growing regions of Eastern Washington and Oregon, and Western Idaho, to the Pacific Ocean.

The average temperature is as follows: Spring, 52°; summer, 73°; autumn, 53°; winter, 34°.

The report is silent upon educational matters, with the exception of a reference to the Territorial University, located at Seattle. The university was erected from the proceeds of the sales of university lands donated by the General Government, and is supported by appropriations from the Territorial treasury, and is under the management of a board of regents. It is reported as being in a prosperous condition.

The conclusion of the report refers to Indian affairs. Strong feeling exists against the reservation system, due to a great extent to the outbreak in Idaho last year, and to Indian troubles in Oregon during the present year. It is represented that a feeling of insecurity exists among the settlers throughout the Territory caused by the disaffection and discontent among the Indians. The governor favors the breaking up of all tribal relations; the extension of homestead and pre-emption rights to the Indians, and would have them made amenable to the laws of the United States and of the Territory.

The governor of Arizona presents an interesting report descriptive of the soil, climate, and resources of the Territory. Although geographically located on the direct line between the populous Atlantic States and Southern California, it is shut out from lines of travel and barred against progress by its inaccessibility. There are neither railroads to it, in it, nor any roads other than those afforded by the natural surface of the ground, and these are rendered difficult to travel by the hot, dry, and sandy or stony ground over which lie the approaches to the settled portions of the Territory. The Little Colorado and Salt River regions are reported to be the granaries of the Territory. The soil is extremely fertile, and the bordering mountains well adapted for stock-raising. The

governor estimates the farming and grazing lands of the Territory as about equal in area to the State of New York. Heat is a dominant feature of the climate. In the dry valley of the Colorado the summer heat is intense and of long duration. It is a noticeable fact that the heat of the sun does not produce the fatal effects of extreme heat in the moist climate of the Atlantic coast.

The chief industry of Arizona is the development of its mineral wealth, gold, silver, and copper being found in large quantities. The difficulties of transportation deter the growth of population and the investment of outside capital. Reference is also made to the insecurity of titles as one of the causes operating against immigration and the influx of money. The public schools of the Territory are reported to be in a good condition, and the progress made in education satisfactory. The governor discusses the Indian question, the condition of the tribes within the Territory, their wants, &c., and makes certain suggestions as to their future treatment. The concluding portions of the report are devoted to the presentation of facts relating to projected railroad routes and suggestions thereon, together with a suggestion that competent persons be employed to examine "the structure of the country" and make experiments from time to time with the view of indicating to the people the situations and depths at which water, whether by artesian wells or other means, may be found.

As reports had not been received from the governors of Dakota, Wyoming, and New Mexico at the time of preparing this report, no reference has been made to their present condition and resources. Should they be received in time they will be printed, so that the series of reports from the several Territories may be complete.

RESTORATION OF INTERIOR DEPARTMENT BUILDING.

At its last session Congress appropriated \$600 to enable the Secretary of the Interior to secure competitive plans for the repairing and reconstruction of the Interior Department building. It also authorized the appointment of a commission of three practical men skilled in the art of building to make report and submit specifications upon the plans secured, and appropriated for the work of restoration the sum of \$100,000.

On the 14th of June, 1878, a circular was sent to many of the leading architects of the country, and to all who expressed a desire to compete, calling for plans for the restoration and reconstruction of the building.

Among the requirements were :

1. A design for the restoration of the building substantially as it stood before the fire.
2. A design for the conversion of the former model-rooms in the north and west wings into office-rooms, and the addition of a model-room above the offices and around the whole building, or over the north and west wings, without, however, changing the present architectural appearance from the street; also design for an additional story.
3. Designs for an entire new roof for the whole building; also, eleva-

tors for the north and south wings; also, for a structure connectin north and south wings through center of court-yard.

Six hundred dollars were offered for the design deemed best recommended by the skilled architects acting as a commission for examination of the plans submitted.

The commission consisted of James K. Wilson, of Cincinnati, Richard M. Upjohn, of New York, and H. W. Hartwell, of Boston.

These gentlemen entered upon their duties on the 22d of July after a careful examination and earnest consideration of the various before them submitted a unanimous report on the 9th of August commending the design which had been submitted by J. A. Vrydagh, Terre Haute, Ind. All the plans were examined by the commission out knowledge on their part of the names of the competing archi The award was thereupon made to Mr. Vrydagh, and \$600 paid to h accordance with the terms of the circular and the act authorizin payment. He was invited to visit Washington for the purpose o ferring with the department in relation to the work, and was subsequ authorized to complete the detailed drawings and submit estimates work in detail; also, the total cost of the reconstruction.

This labor was performed, and the detailed drawings, together the estimates, were received at the department on the 14th of the present month. The total cost of the reconstruction upon the plan recommended by the commission is estimated at \$973,931.90. The reconstruction of the building upon this plan would secure an addition of at least several commodious rooms and other conveniences not now possessed, and would make the entire structure practically fire-proof.

In view of the short time intervening between the completion of the detailed drawings and the meeting of Congress, and the further fact that no obligations can be incurred beyond the amount of money appropriated, I have deemed it proper to delay further action until the plans and estimates shall have been submitted to Congress, and such additional legislation had as will provide for the prompt prosecution of the work. While I recognize the absolute necessity of providing more room for the growing wants of the department, I have not felt authorized to begin the work the completion of which would so materially change the style and architectural proportions of the building as it now stands.

The plans, estimates, and all facts necessary to a thorough understanding of the work will be transmitted to Congress at an early day, the recommendation that, in the event of the design being approved, other direction given, a sufficient appropriation be made to cover the estimated cost of the improvement, so that the reconstruction of the building be no longer delayed.

I am, sir, very respectfully, your obedient servant,

C. SCHURZ,
Secretary of the Interior

The PRESIDENT.



ANNUAL REPORT

OF THE

SECRETARY OF THE INTERIOR

ON THE

OPERATIONS OF THE DEPARTMENT

FOR

THE YEAR ENDED JUNE 30, 1879.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1879.



R E P O R T
OF
THE SECRETARY OF THE INTERIOR.

DEPARTMENT OF THE INTERIOR,
Washington, November 15, 1879.

SIR: I have the honor to submit the following report of the operations of this department during the past year and such suggestions as in my judgment will promote the public interest:

INDIAN AFFAIRS.

The elaborate report of the Commissioner of Indian Affairs, herewith presented, gives an interesting account in detail of the conduct of the branch of the service in his charge and the condition of the Indian tribes.

The difficulties connected with what is called the "Indian problem" have been steadily growing from year to year, as the western country formerly occupied as hunting grounds by Indians exclusively, is required for agricultural settlement and mining industry. In the same measure as white men and Indians more and more jostled one another their contact has been apt to result in collision. We are frequently told that the method followed by our Canadian neighbors in dealing with the Indians is much more successful than ours, and that we should shape our Indian policy after that model. Those who say so seem to forget that the condition of things in the British possessions on this continent has until recently been in an essential point different from that existing in the United States. In the British possessions the Indians occupied an immense territory, full of game, where they have long been permitted to roam at their pleasure, without being interfered with by the progress of settlement. There was comparatively little necessity on the part of the government of providing for the sustenance of the Indians, because they could almost wholly provide for themselves by hunting. Under such circumstances the Indian problem was very simple, and peace was easily maintained. Of late, however, as settlements spread and game becomes less abundant in their Indian country, our Canadian neighbors, if we may believe recent reports, begin to feel that difficulties similar to those we have so long had to contend with, are gradually coming upon them, and that thus they are just approaching the same Indian problem which has been disturbing us for so long a time in various forms. It is to be hoped that they will succeed in solving it

with less trouble than it has brought upon us, but they themselves appear to see reason for apprehension.

Our Indians are scattered over an immense extent of country in tribes and bands of different size, with constantly growing and multiplying settlements of whites between them. The game upon which formerly most of them could depend for subsistence is rapidly disappearing. They occupy a number of reservations, some large and some comparatively small, some consisting in great part of fertile lands, some barren, many of which were secured to them for occupancy by treaties in time gone by. It may have been, and probably was, a great mistake to make such treaties with them as distinct nations; but those treaties were made and are entitled to respect. Many treaty reservations have turned out to be of far greater value in agricultural and mineral resources than they were originally thought to be, and are now eagerly coveted by the white population surrounding them. It is argued that the Indians can not and will not develop those resources; that the country cannot afford to maintain large and valuable districts in a state of waste; and that therefore they should be thrown open to white people who can and will attend to their development. This demand becomes more pressing every year, and although in many cases urged entirely without regard to abstract justice, it is a fact with which we have to deal, and which must be taken into account in shaping an Indian policy.

Whatever troubles and perplexities the presence of the Indians among us may cause, every man who loves justice and who values the honor of the American name will admit that it is our solemn duty to leave nothing untried to prepare a better fate than extermination, and a better rule than that of brute force for the original occupants of the soil upon which so many millions of our people have grown prosperous and happy. That all the Indians on this northern continent have been savages and that many of them are savages now is true; but it is also true that many tribes have risen to a promising degree of civilization, and there is reason to doubt that the rest, if wisely guided, will be found capable following their example.

It is believed by many that the normal condition of the Indians is turbulence and hostility to the whites; that the principal object of Indian policy must be to keep the Indians quiet; and that they can be kept quiet only by the constant presence and pressure of force. This is an error. Of the seventy-one Indian agencies, there are only eleven which have military posts in their immediate vicinity, and fourteen within a military force within one to three days' march. Of the 252,000 Indians in the United States, there have been since the pacification of the Sioux at no time more than a few hundred in hostile conflict with the whites. Neither does it appear that such partial disturbances have been provoked by the absence or prevented by the presence of a military force. Of the four disturbances that have occurred within the last two years, three broke out in the immediate presence of such a military

force and only one without it. At this moment a band of less than eight hundred Utes, and another of about one hundred and fifty Indian marauders in New Mexico, in all less than one thousand of an Indian population of a quarter of a million, are causing serious trouble. In fact, the number of white desperadoes who were within the last twelve months banded together in New Mexico for murder and rapine was larger than that of the Indians recently on the war-path near the southern part of the Territory. While I am by no means disposed to belittle the deplorable nature of Indian disturbances or the great value of a military force in suppressing them, it is but just to the Indians to point out the important fact that disturbance and hostility is the exception and peaceable conduct the rule; that a very large majority of Indian reservations are in a condition of uninterrupted quiet without the presence of a coercing force, and the equally significant experience that the more civilized an Indian tribe becomes, the more certainly can its peaceable and orderly conduct be depended upon. The progress of civilization and the maintenance of peace among the Indians have always gone hand in hand.

It is frequently said that we have no Indian policy. This is a mistake, at least as far as this department is concerned.

If a policy consists in keeping a certain object in view and in employing all proper means at command to attain that object, then this department has one. The ends steadily pursued by it are the following:

1. To set the Indians to work as agriculturists or herders, thus to break up their habits of savage life and to make them self-supporting.
 2. To educate their youth of both sexes, so as to introduce to the growing generation civilized ideas, wants, and aspirations.
 3. To allot parcels of land to Indians in severalty and to give them individual title to their farms in fee, inalienable for a certain period, thus to foster the pride of individual ownership of property instead of their former dependence upon the tribe, with its territory held in common.
 4. When settlement in severalty with individual title is accomplished, to dispose, with their consent, of those lands on their reservations which are not settled and used by them, the proceeds to form a fund for their benefit, which will gradually relieve the government of the expenses at present provided for by annual appropriations.
 5. When this is accomplished, to treat the Indians like other inhabitants of the United States, under the laws of the land.
- This policy, if adopted and supported by Congress and carried out with wisdom and firmness, will in my opinion gradually bring about a solution of the Indian problem without injustice to the Indians and also without obstructing the development of the country. It will raise them to a level of civilization at least equal to that of the civilized tribes in the Indian Territory and probably to a higher one, considering the stimulus of individual ownership in land. It will not take away from them by force what in justice and equity belongs to them, but induce them to

part with what they cannot cultivate and use themselves, for a fair compensation. It will open to progress and improvement large districts now held by Indians, which will then be of no real advantage to them and are now to nobody else.

It must be kept in mind that this cannot be done in a day. We are frequently told that the tribal relations must be broken up; that the reservation system must be abandoned, &c. Whatever is to be the ultimate end and result of the policy stated, it is certain that habit has grown up in the course of centuries will not at once yield to a mere word command. It is equally certain that the introduction of industrial habits, that settlement in severalty, the foundation of permanent homes, the conferring of individual title, and thereby the practical individualization of the Indian, must be accomplished first, and in accomplishing the necessary ends the influence of tribal authority has in many, if not most cases, whenever well taken advantage of, been found of great usefulness in the progress of improvement. An attempt to accomplish the objects at once all over the country, without the intermediate stages, military force, would undoubtedly result in many cases in Indian warfare of unprecedented magnitude and bitterness, which would require a much larger army than we at present possess, and prove in the end not only the most inhuman, but in blood and treasure the most expensive of methods. Recent experience has convinced me that all the desired ends can be most successfully reached by watching and improving every favorable opportunity for giving a wise and vigorous impulse and lending a helping hand to the best capacities of the Indians, and that this method will bring about general good results in a shorter time than would be reached by the heroic treatment.

In fact the progress made during the last two years has been greater than might have been anticipated, and it encourages the hope that the ends above indicated may be accomplished in a comparatively short space of time.

One of the peculiar disadvantages under which the conduct of the Indian service labors consists in the circumstance that every mishap, even the most trivial and untoward accident, whether the service be responsible for it or not, very often attracts public attention and criticism, the latter sometimes entirely unfounded and by no means based upon a sufficient knowledge of facts, while the good that is done and the success achieved are apt to pass entirely without public notice. Of the results of the policy pursued by this department, I can speak partly from personal observation made during a tour of inspection undertaken a few months ago, and partly from reports furnished by the inspectors and agents in the service.

AGRICULTURE AND HERDING.

There has been much theoretical speculation as to what kind of practical work the Indians are best adapted for. By some men, whose views claim authority, it is asserted that the natural transition from the sti-

of the savage hunter to that of the agriculturist is the pastoral pursuit, and that therefore the Indian must be made a herdsman and stock-raiser before he can be made a farmer. In theory this sounds well; but in practice it turns out that it cannot be generally applied. The possession of one or two cows does not make a man a herdsman. To make the Indians herders would require large quantities of cattle, so as to give a herd to every head of a family; and inasmuch as they do not possess that large quantity of cattle now, it would have to be furnished them by the government. Moreover, the pursuit of herding furnishes a steady occupation from day to day only to a comparatively very small number of persons. A few young men could attend to the herds of a large number of Indians, and the rest would, in the mean time, remain idle. If occupation is to be furnished to them it must be found in another direction, and that can be only agriculture on a larger or smaller scale. So it is clear that whatever virtue there may be in stock-raising, and however well adapted the Indian in the transition state might be to it, the pursuit of agriculture must necessarily accompany it to occupy the majority of them.

Farming is, of course, first begun on a small scale and in an imperfect way; but the number of Indians engaged in agricultural pursuits, the number of those who raise products sufficient for their own support and even a surplus for sale, and the aggregate quantity and value of these products, are probably larger than is generally understood.

For minute details I refer to the elaborate exhibit contained in the report of the Commissioner of Indian Affairs.

As to the general progress of agricultural pursuits among the Indians, I may state that according to the statistics furnished to this department the Indians on reservations have under cultivation 157,056 acres; 24,270 acres have been broken this year by Indians themselves. A larger area would have been added but for the extraordinary drought which in several localities, especially in the Indian Territory, impeded agricultural enterprise.

The products raised by the reservation Indians this year amount to 328,637 bushels of wheat and 643,286 bushels of corn, 189,654 bushels of oats and barley, 390,698 bushels of vegetables, such as potatoes, turnips, beans, &c.; 48,353 tons of hay cut. In addition to this, 4,677 acres were cultivated, and 2,861 broken on the government farms at the various agencies, for the benefit of the Indians, in part by Indian labor. The products raised on these farms amounted to 15,232 bushels of wheat, 16,814 bushels of corn, 17,023 bushels of oats and barley, 11,925 bushels of vegetables, and 4,698 tons of hay cut. This exhibit of products raised by Indian labor does not include the five civilized tribes in the Indian Territory, Cherokees, Chickasaws, Choctaws, Creeks, and Seminoles, who cultivated 237,000 acres, and whose products are stated at 565,400 bushels of wheat, 2,015,000 bushels of corn, 200,500 bushels of oats and barley, 336,700 bushels of vegetables, and 176,500 tons of

hay. At the same time the raising of stock has been encouraged as much as possible. There are now owned by reservation Indians 199,700 horses, 2,870 mules, 68,894 head of cattle, 32,537 swine, and 863,525 sheep, the latter principally by the Navajoes. The five civilized tribes in the Indian Territory are reported to have 45,500 horses, 5,500 mules, 272,000 head of cattle, 190,000 swine, and 32,400 sheep. Provision has been made for an additional distribution of 11,300 head of stock cattle among the uncivilized tribes, preference being given to those individual Indians who have taken the best care of their stock heretofore. The complaints frequently made in former times that the Indians would slaughter their cows and eat them has ceased almost entirely. On the contrary, it is found that they are beginning to take excellent care of their domestic animals, and to be proud of the increase of their stock. Many have commenced raising swine and poultry, and it is thought expedient to encourage such beginnings in every possible way. The cultivation of garden vegetables among them is also rapidly spreading. Preparations have been made to increase the area of cultivated soil very largely next year. Considerable quantities of agricultural tools and implements have been distributed, and the demand is constantly growing.

For the first time this year the uncivilized tribes in the Indian Territory were induced to take some part in the agricultural and industrial fair at Muskogee. Several of them sent delegations, and although their contributions were at first very limited, it is expected that the repetition of the experiment will stimulate a spirit of rivalry among them. Another agricultural fair was held by the Chippewas on the White Earth reservation in Minnesota, where the contributions of agricultural products, of stock, and articles of domestic industry came exclusively from Indians, and where Indians acted as managers and judges. According to all accounts, the exhibition was surprisingly successful. Some of the Sioux chiefs in Southern Dakota on the occasion of my visit a few months ago expressed a desire to have an agricultural fair on their reservation next year, which might seem somewhat premature, as they are just starting in civilized pursuits; but their ambition in this respect is laudable and deserves every encouragement.

The building of houses to supersede the traditional wigwams and to cultivate the love of, and attachment to permanent and comfortable home is pushed with energy wherever it is possible. Several of the more advanced tribes, not speaking of the civilized tribes of the Indian Territory, are all completely housed or nearly so, and other tribes will be in the same condition in less than a year.

INDIAN FREIGHTING AND MECHANICAL PURSUITS.

Agriculture and herding, however, are not the only fields on which Indian labor has been introduced. In my last annual report I mentioned that late in the autumn of 1878 the conveyance of supplies from the Missouri

River to the Sioux agencies recently established in Southern Dakota was intrusted to the Indians themselves. The department furnished wagons and harness and the Indians their ponies as draft animals. A shout of derision all along the Upper Missouri greeted the experiment. A disastrous failure was confidently predicted by those interested in the freighting business and many others. But not only did the Sioux succeed in keeping their agencies supplied during an uncommonly hard winter, taking their wagons over desolate plains without roads, a distance of 90 and 193 miles respectively from the river, but they have proved the most efficient, honest, and reliable freighters the Indian service ever had. Not a pound of freight was lost; although the Indian freighters, occasionally delayed by accidents or extraordinary difficulties on their weary way, were sometimes without provisions, not a cracker box nor a pork barrel was broken open. In the course of the year Indian freighting has been introduced at a large majority of the agencies this side of the Rocky Mountains which are at a distance from railroad depots and steamboat landings, and uniformly with the same success. There are now 1,356 wagons run by Indian teamsters in that occupation, and the overland freighting is done better, more faithfully, and far more economically by them than it ever was done for this department by white contractors. But for the difficulties connected with the giving of bonds we should now be in a condition to have the Indians make bids for freighting contracts for other branches of the public service. The introduction of freighting among them has not only been a great success in itself, but has given a powerful impulse to the desire to work and to earn money among all the Indian tribes that have been so employed. It will be introduced at all the agencies where it is practicable.

The employment of Indians in the mills and workshops on the agencies has been tried with equal success. In some of our grist and saw-mills Indians act as engineers. In the blacksmith shops, saddler shops and carpenter shops at the agencies 185 young Indians are instructed as apprentices and their number is being constantly increased. Some of the shops are successfully controlled by Indians as foremen and the employment of Indians as laborers in a variety of other ways has been generally introduced. On Indian reservations where suitable clay is at hand the establishment of brick yards to be worked by Indians is contemplated and will be begun next spring. On the Sioux reservations in Southern Dakota Indians are engaged in putting up telegraph lines. The building of houses for Indians by white contractors has been abandoned, and Indians are now constructing their houses themselves, window sash, shingles, and planks, the latter sawed in the mills on the reserves, being furnished to them. The old Indian prejudice that it is improper for men to do anything else than hunt and fight, and that squaws only should work, is being rapidly and very generally overcome. The progress made in this direction is indeed unequal on different reservations, but progress has been made almost everywhere and at many

agencies it has been very great and surprisingly rapid. Only in very rare cases was any unwillingness or resistance shown by the Indians. It is reasonable to expect that if the present system be pursued with patience, attention, and energy, results still more satisfactory and general will be attained.

EDUCATION.

The education of Indian youth has been the subject of special solicitude, and I am very glad to record the fact that our efforts in this respect have been encouraged in a multitude of instances by exhibition of urgent anxiety, even among the so-called wild tribes, on the part of Indian parents to have their children instructed in the ways and arts of civilized life, and especially in the English language. It is the experience of the department that mere day-schools, however well conducted, do not withdraw the children sufficiently from the influences, habits and traditions of their home-life, and produce for this reason but a comparatively limited effect. The establishment of boarding-schools on the reservations for elementary and industrial instruction has therefore been found necessary, and as far as the means appropriated for educational purposes permit, this system is being introduced. In the schools children of both sexes are instructed, not only in the rudiments of knowledge and the English language, but also in the various branches of domestic industry. The number of children attending school in the uncivilized tribes was 6,229 last year; this year it is 7,193. In the five civilized tribes in the Indian Territory it was last year 5,993, and 6,222 this year. While thus progress is evident, yet my own personal observation has convinced me that many of the schools at the agencies are not as efficient in their working as they should be, and their improvement will be the subject of special care.

In my last annual report I mentioned the experiment made by the department during the preceding year in sending fifty Indian boys and girls selected from different tribes to the Hampton normal and agricultural institute in Virginia, to receive an elementary English education and also practical instruction in farming and other useful work. Under the wise and energetic guidance of Mr. Armstrong, the principal of the Hampton school, this experiment has led to very gratifying results. The progress made by the pupils in the acquisition of knowledge and of the habits and occupations of civilized life was of course unequal, but in all cases satisfactory and in some remarkable. During the summer vacation many of the youths were sent singly to farmers in the Eastern States, and their conduct, so far as I have been informed, has in all cases been favorably reported upon. A personal inspection of the Hampton school satisfied me that the number of Indian pupils there could be advantageously increased, which increase has been provided for. The success thus gained seemed to justify the extension of the experiment, and the Secretary of War, with a willingness for which I desire to express my grateful acknowledgments, consented at my request

to turn over to the Interior Department the military barracks at Carlisle, Pennsylvania, no longer used by the army, for the establishment of an Indian school on a larger scale. Captain Pratt, who had already rendered valuable services to the cause of Indian education in Florida and at Hampton, was sent by this department to the various Indian agencies to select children of both sexes for the Carlisle school, and he, aided by Miss F. A. Mather, of Massachusetts, a lady of great merit, performed this task with energy and judgment. One hundred and fifty-eight Indian boys and girls, Sioux, Bannocks, Kiowas, Comanches, Cheyennes, Arapahoes, Poncas, and Nez Percés, mostly the children of prominent men in their respective tribes, have been taken to Carlisle Barracks, and the school is now in full operation. Arrangements are also made to have a number of Indian boys and girls belonging to tribes on the Pacific Slope educated in like manner at Forest Grove, in Oregon. Their number will be increased as soon as sufficient means and accommodations can be found. If this experiment proves successful, of which there seems to be a very hopeful prospect, other public buildings not otherwise used should be placed at the disposal of this department for the same purpose. In my opinion the withdrawal of as large as possible a number of Indian youths from the influences of their more or less savage home surroundings, their education and training in useful knowledge and arts in the very atmosphere of civilization, and after a few years so spent their return among their people as teachers and examples can hardly fail to produce a salutary effect upon the whole Indian population. It has frequently been said that young Indians so educated will, after their return, speedily relapse into the barbarous habits of their tribes and leave these acquirements unused. This might have been the case when a young Indian of this description found himself with those acquirements in the midst of his people solitary and alone, without sympathy and co-operation; but it will not be apt to happen if each tribe or band has in it a larger number of young men and women so educated who can lean upon and co-operate with one another and take advantage of that desire for education which now appears to be found among the Indians generally. It seems, therefore, important that the number of pupils at these schools be increased as much as possible.

Several Indian chiefs whose children are at Hampton and Carlisle have expressed a desire to visit those schools next spring and to bring their wives with them for that purpose—a sort of Indian visiting committee. It is thought that such a visit will be calculated to do much good, and it will therefore be encouraged within proper limits.

So far the policy above stated could be carried out with the means granted to this department. But other things equally important could not be done by this department without further essential legislation, which has been repeatedly recommended to the consideration of Congress, but, I regret to say, without success.

SETTLEMENT IN SEVERALTY.

On some reservations lands have already been allotted to heads of families, and on several others the allotment will soon take place. According to the promise given by the government the lands occupied by the Brûlé (Spotted Tail) Sioux at Rosebud, and by the Ogalallas (Red Cloud) at Pine Ridge Agency, have been surveyed and regularly laid out in farm lots. The "Sioux land-book" will now be opened according to the provisions of the treaty of 1868, and in the course of a few months we may expect to see those populous branches of the Sioux family, which but a few years ago were counted among the most restless, hostile, and untamable Indians, but whose progress during the last eighteen months has been surprisingly rapid, settled as farmers upon their lands. The desire for allotment of lands in severalty is now expressed by Indians on a considerable number of reservations with great urgency. On my visit to various tribes I was asked by a great many of them that "papers" be given them as soon as possible to show that the land they cultivate is their own; and in several instances they intimated that they would not feel secure in its possession and could not cultivate it with any certainty of being permitted to enjoy the fruit of their labor, until such papers were granted.

To make their settlement permanent, to cultivate among the Indians the pride of individual ownership of property and the love of a fixed home, and thus to encourage a feeling of independence of their tribal relations, it is necessary that by law a title in fee to the land thus allotted should be conferred upon them, and considering the improvident habits in which a large majority of the present generation have grown up, and it being a matter of experience that in many cases in which Indians had been invested with the fee title some of them were induced to part with it without proper equivalent, and a larger portion of them were robbed of it by fraudulent practices bearing upon their ignorance and credulity by unscrupulous white persons, it is essential that the title in fee be made inalienable for a certain period of time, say twenty-five years, when the growing generation may be expected to be sufficiently instructed to take care of their property. To this end a bill was submitted to Congress for two sessions providing that a fee title to the lands allotted to Indians inalienable for twenty-five years be conferred upon them individually, but I regret to say that this bill has never been acted upon. I would earnestly recommend that this matter be again urged upon the attention of Congress at the impending session.

GOVERNMENT OF LAW ON THE RESERVATIONS.

If the Indians are to be advanced in civilized habits it is essential that they be accustomed to the government of law, with the restraints it imposes and the protection it affords. To meet this necessity a bill was introduced at the last session of Congress providing, 1. That the President

be authorized to prescribe suitable police regulations for the government of the various Indian reservations, and to provide for the enforcement thereof; 2. That the laws of the respective States and Territories in which Indian reservations are located, relative to certain crimes, shall be deemed and taken to be the law and in force within such reservations, and the district courts of the United States within and for the respective districts, and the Territorial courts of the respective Territories, in which such reservations may be located, shall have original jurisdiction over all such offenses committed within such reservations; 3. That in respect to all that portion of the Indian Territory not occupied by any of the five civilized tribes, the laws of the State of Arkansas relative to certain crimes shall be deemed and taken to be the law and in force therein, and the United States district court for the western district of Arkansas shall have exclusive original jurisdiction over all such offenses arising in said portion of the Indian Territory; and, 4. That the place of punishment of any and all of such offenses shall be the same as for other like offenses arising within the jurisdiction of said respective courts. This bill was favorably reported upon by the Judiciary Committees of both Houses of Congress, but no action was taken thereon. In view of the importance of this subject, I earnestly recommend that it be urged upon the attention of Congress at the present session.

THE INDIAN POLICE.

The organization of a police force consisting entirely of Indians, begun on a large scale two years ago, has been extended to almost all the agencies, and it has proved very salutary and effective in the maintenance of order and the protection of property. The police has throughout shown great fidelity to duty and zeal in executing the directions given by the officers of the government. It is essential that for this force young men be selected of intelligence, good habits, and respectable standing in their respective tribes, and this rule has been invariably observed. Considerable difficulty in making such selections is found in the circumstance that the pay of \$5 per month provided by Congress for these policemen is entirely inadequate, for the reason that the class of men needed by the government for this service would, if not so employed, earn a much greater amount by work done for their own benefit. I earnestly concur, therefore, in the recommendation made by the Commissioner of Indian Affairs, that the pay of the policemen be sufficiently increased to enable them to devote their services to the government without loss to themselves. Only thus can we hope to keep the proper class of men in this branch of the service.

SALE OF ARMS AND AMMUNITION TO INDIANS.

Whenever an Indian outbreak occurs the question is asked where the Indians obtain their arms and ammunition. For many years no arms have been furnished to Indians by the government, except to those who were

in the government's service as scouts or policemen. By the present ~~and~~ administration of Indian affairs the Indian traders, as well as all other persons on Indian reservations, have been strictly prohibited to sell arms or ammunition to the Indians, and that prohibition has been rigorously enforced. The only way in which Indians can obtain fire-arms and ammunition is by purchase from persons outside of the reservations, over whom the Indian service has no control. There is nothing in the way of legislation prohibiting this obnoxious trade except a joint resolution passed by Congress in November, 1876, authorizing and requesting the President "to take such measures as in his judgment may be necessary to prevent metallic ammunition being conveyed to hostile Indians of the Northwest and to declare the same contraband of war in such district of country as he may designate during the continuance of hostilities," and a proclamation of the President issued in pursuance thereof prohibiting the sale of fixed ammunition in any district of the Indian country occupied by hostile Indians or over which they roam, and declaring all such fixed ammunition introduced into such country and liable in any way to be received by such hostile Indians contraband of war, to be "seized by any military officer and confiscated"; this prohibition to apply "during the continuance of hostilities" to all Indian country, or country occupied by Indians or subject to their visits, within the Territories of Montana, Dakota, and Wyoming, and the States of Nebraska and Colorado.

It is evident that this prohibition, in which the sale of arms is not mentioned at all, is confined to the sale of fixed ammunition only during the continuance of hostilities in certain districts, when such fixed ammunition shall be seized and confiscated by military officers, and that leaves the sale of arms and ammunition in any quantity to Indians outside of the reservations, where the Indian service has no authority in ordinary times, entirely free. If this trade is to be stopped, a more stringent and sweeping statute is absolutely required.

THE INDIAN TERRITORY.

Last spring a movement was organized in some of the Western States for the invasion and occupation by unauthorized persons of certain lands in the Indian Territory, which had been ceded by the Cherokees to the government for the purpose of settlement by other Indian tribes. A large number of people, mostly from the States surrounding the Indian Territory, were discovered in the act of entering the Territory for the unlawful object stated. On the 20th of April last the President issued a proclamation warning all persons who were intending then to invade the Indian Territory against attempting to settle on any lands therein and those who had already so offended, that they would be removed, if necessary, by military force. At the same time corresponding instructions were given to the Army, and with the diligent assistance of the

military force in the Territory the invasion was speedily checked and the intruders removed.

While this was accomplished with comparative ease, owing to the promptness and vigor of the interference by the government, which repressed the mischief in its incipiency, it must be admitted that had the information which caused proper measures to be taken, in any way been delayed, or had any time been lost in acting upon it, the invasion of the Indian Territory, as planned, might in the mean time have assumed such proportions as to make its repression a matter of extreme difficulty. There is no doubt that many people in the Western States and Territories are eagerly watching every possible chance to obtain possession of the fertile lands of the Indian Territory for purposes of settlement as well as speculation, and it will require the utmost watchfulness on the part of the government to prevent lawless attempts to wrest from the Indian tribes the possession of lands guaranteed to them by treaty. This watchfulness will not be wanting, but it is also probable that the performance of this duty will become more difficult every year as the western country is more densely occupied.

When visiting the Indian Territory this autumn I deemed it proper to call the attention of the representative men of the civilized tribes whom I met at Muskogee, to this circumstance. I assured them that this Administration would meet any repetition of the lawless attempt witnessed this year with the same energy and fidelity, and I had no doubt its successors would endeavor to do the same; but that the difficulties of protecting the integrity of the Territory might in the course of time increase beyond control; that it would be wise for them to consider and provide for this emergency; that in my opinion the best thing they could do for themselves would be to divide their lands among their people in severalty in such lots as they might think best; to obtain individual title in fee like white men; and every member of their tribes being thus provided for, to consider how the rest of the lands not occupied and cultivated by themselves could for their benefit be disposed of to other settlers, so that if they did not keep those lands themselves they would at least secure their value in money; that an individual title to lands actually occupied by them would be under all circumstances safer to them than their national title without individual fee; that the individual ownership of land would also be calculated to stimulate their progress and prosperity; that as their friend I advised them to take this matter into serious consideration while under the assured protection of the government they were perfectly free to do so; that if they acted upon such advice the government would find itself far better able to secure to them the value of their lands than it would be to maintain the present state of things, if at some future day the flood of immigration should sweep over the borders of the surrounding States into the Indian Territory, finding them unprepared.

The idea of dividing their lands among them in severalty is probably not yet popular with a majority of the members of the civilized tribes

in the Territory, but it is to be hoped that this important question thus brought to their attention will be taken up by them for discussion and serious consideration.

THE WHITE RIVER UTES.

The history of the outbreak on the White River Ute Reservation in Western Colorado is given at length in the report of the Commissioner of Indian Affairs. The Utes are one of the very few tribes of Indians who still find on and around their reservations game enough to enable them to live on hunting or to make hunting a profitable business. This is one of the reasons why they are less inclined to engage in occupations which require real work. On the borders of the Ute Reservation there are trading establishments carried on by white men who have made it their business to advise the Utes against going to work and encouraged them to devote themselves exclusively to the pursuit of hunting as of old, so that these traders might have the benefit of profitable traffic in skins with them for which they paid the Indians in various goods, arms, cartridges, and whisky. These traders being outside of the reservation the officers of the Indian service had no control over them, and as they attracted the Indians to their establishments by all sorts of allurements they made it extremely difficult to the agents to keep the Indians in proper discipline. The Indians therefore strayed off on all possible occasions, and deeming it prudent to spare the game on the reservation they extended their hunting excursions over the adjacent country, especially North and Middle Park, to the annoyance of the settlers. They also, in some instances, set fire to the grass and timber for the purpose of driving the game, and hence the devastation of several timber districts in Western Colorado may be ascribed to them. I have, however, many reports before me which show that a majority of the forest fires in Colorado are not attributable to the Indians but to white hunters, explorers and tourists who are almost uniformly in the habit of carelessly leaving their camp-fires burning when they go from one place to another.

The hunting expeditions of the Indians in North and Middle Parks led to frequent complaints on the part of settlers, and for more than two years a correspondence has been going on between this department and the military authorities about the practicability of locating a military post in the neighborhood of the White River Reservation for the purpose of preventing the excursions of the Indians beyond their borders. This correspondence led to no result, General Pope insisting that it would be better to remove all the bands of the Ute tribe to a consolidated reservation farther to the south, while General Sheridan expressed the opinion that an attempt to remove the Utes from their old hunting grounds, especially without their consent, would inevitably result in an Indian war. Both agreed, however, that they had not troops enough at their disposal to establish a new post near the White River Reservation. The complaints of the settlers, of the governor of Colorado, as well as

of Agent Meeker, who had applied for military aid in keeping the Indians on the reservation, growing louder, the matter was referred in July last to Major Thornburgh, commanding at Fort Steele, for report. Major Thornburgh reported that the complaints about outrages committed by the Indians outside of the reservation were untrue; that the Utes had been merely on a hunting expedition but had harmed nobody, and "that he had never received any orders from his superiors to cause the Indians to remain on their reservation at the request of the agent, but was ready to attempt anything required of him."

Then occurred the difficulty between Agent Meeker and some of his Indians in consequence of the plowing of a certain piece of land, the assault upon the agent, Mr. Meeker's request for troops to restore order and to arrest the offenders, the advance of Major Thornburgh's command upon the reservation, the fight in which Major Thornburgh and some of his men were killed, the massacre of Agent Meeker and the agency employés, the valiant defense of the surrounded troops under Captain Ayne, the heroic feat of Captain Dodge and his company of colored cavalry, the splendid march of General Merritt for their relief, the advance to the agency and the sudden retreat of the Indians, as set forth in detail in the report of the Commissioner of Indian Affairs.

As soon as the attack upon Major Thornburgh had become known to him, Ouray, the head chief of the Ute tribe, had sent his orders to the White River Utes to cease fighting, and to retreat before the military forces. The department received information of this fact on November 3, and on the same day I instructed Charles Adams, esq., of Colorado, an officer in the Post-Office Department, who at my request was, by the kindness of the Postmaster-General, detailed for temporary service in his department, a gentleman known by me to be well acquainted with the Ute chiefs and to possess their confidence, to proceed as a special agent to the Los Pinos Agency and to put himself in communication with Ouray, and eventually with the White River band of Utes. The end he was desired to accomplish was twofold: first, to effect the liberation of the wives and children of Agent Meeker and his employés whom the White River Utes had carried with them as captives; and, secondly, if possible, to prevail upon the White River Utes to surrender those of their number who were involved in the attack upon Major Thornburgh and the massacre of Agent Meeker and his employés. Mr. Adams acted in the performance of this task with an intrepidity and judgment worthy of the highest praise. He found in Chief Ouray a loyal and energetic friend, and then went personally to the camp of the White River hostiles on Grand River, where the captive women and children were given up to him. He then proceeded to General Merritt's camp on White River to communicate to him what had happened and what he still hoped to accomplish. From there he returned by way of the hostile camp to Los Pinos for further conference with Ouray. As soon as the report of the liberation of the captive women and children was received by this

department, Mr. Adams was instructed, October 27, to propose the following terms: that a commission, consisting of Brevet Major-General Hatch, Mr. Charles Adams, and Chief Ouray, be instituted to meet at the Los Pinos Agency to take testimony in order to ascertain the guilty parties among the White River Utes, those guilty parties so ascertained to be surrendered and dealt with as white men would be under like circumstances. These instructions had been, after consultation, approved by the President and General Sherman. On the day following a dispatch was received from Mr. Adams suggesting, upon conference with Ouray, the appointment of a commission in the same manner and to the same end. The commission was appointed, and entered upon its labors on November 14. It is hoped that it will accomplish its purpose.

While Mr. Adams was on his way to effect the liberation of the captive women and children, military operations were suspended, but a considerable body of troops was concentrated in Southern Colorado, while General Merritt was held in the north near White River, so as to be ready for action in case of the failure of the negotiations.

The outbreak on the White River Reservation created in the State of Colorado intense excitement. The wildest rumors were set afloat, that the border settlements and mining camps were being attacked by the Indians, that the Uncompahgre Utes had in a body taken part in the attack on Major Thornburgh's command, that the Uintah Utes, the Arapahoes, and Shoshones had re-enforced them, that a general Indian war was impending, and so on. All these rumors have proved entirely unfounded. It was also urgently demanded that military operations should go on while the captive women and children were still in the hands of the hostiles and Mr. Adams was among the Indians to save them, and while it was absolutely certain that a continuation of military operations under such circumstances would have resulted in the sacrifice of those captives and Mr. Adams in addition. Such unreasoning appeals could of course not be heeded by those who had the responsibility of the conduct of affairs, and the result has amply justified their action. If the commission succeeds in its work, it will have saved the country an Indian war which would indeed have been destructive to the Indians engaged in it, but also calculated to drive into hostilities Indians originally desiring to remain peaceable, to expose our troops to a harassing and most difficult campaign on ground most favorable to the hostile Indians, and the western part of Colorado with its border settlements and mining camps to incalculable devastation by a savage foe. It was considered the duty of the government to leave no proper means untried to avert such a calamity. War ought always to be, not the first, but the last resort. Even if the commission should fail in its work, the temporary suspension of hostilities will at least have resulted in saving the lives of the captive women and children, and probably in limiting hostilities to that band of Indians which began the disturbance.

As to the cause of the trouble, it remains only to be said that it can-

not be found in any just complaint on the part of the Utes. While two years ago they were for a short time insufficiently supplied in consequence of the delinquency of a transportation contractor, who subsequently has been prosecuted by this department and tried and convicted for grave offenses, the White River Utes have since then been amply supplied with all they needed. Their hunting parties are known to have left the carcasses of the game killed in large quantities on the round, taking merely the skins for trading. Such things are not done by hungry people. Agent Meeker was known as a man of unimpeachable integrity. When he endeavored to plow land for agricultural purposes, which furnished the immediate occasion for the first assault on him, he did it for the benefit of the Indians, and not for himself. The same thing has been done at a large number of agencies without the least opposition from the Indians, and with great success. The real cause of the trouble is, in my opinion, to be found in the fondness of the mountain Indians for their old wild habits, stimulated by the abundance of game in that part of the country, their disinclination to submit to any civilizing restraint, the apprehensions produced among them by the rapid advance of settlements and mining camps encroaching upon their hunting-grounds, the evil influence exercised upon them by whites living upon the borders of the reservation, and the advantage taken of a temporary excitement by the mischievous characters among them upon the approach of a military force.

It is expected that the occurrence of this trouble and the transactions following thereupon will result in such arrangements as will be calculated to prevent, for the future, hostile contact between the white inhabitants and the Indians in that part of the country. Every proper effort will be made by this department to that end.

SOUTHERN UTES.

I beg leave to invite attention to the statement made by the Commissioner of Indian Affairs concerning an agreement made in 1878 by a commission appointed in pursuance of law with three bands of Utes living on the southern strip of the Ute reservation. By that agreement a large tract of land was ceded by the Indians to be sold, and the proceeds thereof, after deducting the expenses of survey and sale, to be invested for the benefit of the Indians; the Indians then to have a new agency on the headwaters of the Piedra, San Juan, Blanco, Navajo, and Chama Rivers. The agreement was submitted to Congress and no action taken thereon. Part of this agreement provided in particular for the sale of an exceptionally valuable tract of four miles square for the sum of \$10,000. Congress at its last session was asked to make appropriation therefor, but failed to do so. Inasmuch as this tract has in the mean time, in great part, been occupied by white settlers, without the government performing its part of the bargain by the payment of the stipulated sum of money, the failure of the appropriation constitutes a

just grievance of the Indians, which in justice should be speedily redressed. I therefore earnestly recommend that the necessary appropriation be made.

VICTORIA AND THE SOUTHERN APACHES.

The Commissioner of Indian Affairs gives in his report an elaborate account of the wanderings, removal, settlements, escapes, and marauding expeditions during several years of certain bands of Southern Apaches. Victoria, one of their chiefs, came, on the 30th of June last, with a small number of men, to the Mescalero Agency, in New Mexico, and after a conference with the agent promised to stay there quietly, whereupon arrangements were made to bring to them their wives and children, from whom they had been long separated, then living on the San Carlos Reservation in Arizona; but the consequences of their former reckless life and misdeeds suddenly turning up, upset all these arrangements and good intentions. In July last, three indictments had been found against them in Grant County, New Mexico, for horse stealing and murder; and believing themselves pursued by the officers of the law, they effected their escape from a military guard watching them, and took with them other Southern Apaches from that reservation. Then their old marauding life began again, and they committed a number of murders and robberies in Southern New Mexico. The vigorous pursuit by a military force under Major Morrow succeeded, after rapid and difficult movements, to drive them across the Mexican border, and they are now on foreign soil. These small bands, living in a country now and then infested by gangs of white desperadoes, who make marauding a profession, are vagabonds by lifelong habit, and in view of the atrocities committed by them, should be dealt with in the severest manner should they ever appear on our territory again.

CHIEF MOSES AND HIS PEOPLE.

The troubles and tribulations to which Chief Moses and the bands of Indians that recognize him as their chief have been exposed for some time past, are fully set forth in the report of the Commissioner of Indian Affairs. I invite attention to his narrative as furnishing a fair illustration of the difficulties the Indian service has to contend with in its efforts to prevent collision between Indians and white settlers when the latter are determined, upon any pretext and by any means, to drive the Indians from the lands they occupy. The Commissioner states in detail how Moses, at that time not living on any reservation nor under the control of any agent, was charged with complicity in a murder; how he was waylaid, arrested, thrown into jail and threatened with death, and how at a critical moment this department interposed, ordering him to come to Washington, to have his case inquired into. After several conferences with him, in the course of which he produced the impression that

he was an innocent man, an impression confirmed by information received from Washington Territory, especially from military officers, it was agreed that he and his people should occupy a tract of land adjoining the Colville Reservation in Washington Territory, set apart for them by executive order. The delegation then returned to Washington Territory, and it required special precautions on the part of the department commander, General Howard, and the governor of the Territory, to have them safely conveyed to their new place of abode.

The murder case in which Moses had been charged with complicity has since been tried, and, while three Indians were convicted of the crime, Moses was found entirely guiltless.

There never was any trustworthy information in the possession of this department to justify any suspicion as to the conduct or intentions of this Indian chief. On the contrary, he is known to have rendered good service during the Bannock trouble in maintaining peace and good order among the Indians under his influence. But the efforts to take his life or at least his liberty, or to drive him into hostilities, appeared to be so persistent that it required the most watchful and active interposition on the part of the government to prevent a conflict. On several occasions I requested the governor of the Territory to give his personal attention to this matter, and to him, as well as to General Howard, I have to express my acknowledgments for prompt and effective co-operation with this department in the measures taken to effect a peaceful solution of the difficulty.

At present Moses and his people are on their reservation, but this department is informed that new attempts are made to draw them into trouble, which attempts, it is hoped, will result in failure.

THE PONCAS.

That the Poncas were grievously wronged by their removal from their location on the Missouri River to the Indian Territory, their old reservation having, by a mistake in making the Sioux treaty, been transferred to the Sioux, has been at length and repeatedly set forth in my reports as well as those of the Commissioner of Indian Affairs. All that could be subsequently done by this department in the absence of new legislation to repair that wrong and to indemnify them for their losses, has been done with more than ordinary solicitude. They were permitted to select a new location for themselves in the Indian Territory, the Quapaw Reserve to which they had first been taken, being objectionable to them. They chose a tract of country on the Arkansas River and the Salt Fork northwest of the Pawnee Reserve. I visited their new reservation personally to satisfy myself of their condition. The lands they now occupy are among the very best in the Indian Territory in point of fertility, well watered and well timbered and admirably adapted for agriculture as well as stock-raising. In this respect their new reservation is unquestionably superior to that which they left behind them on the Missouri

River. Seventy houses have been built by and for them of far better quality than the miserable huts they formerly occupied in Dakota, and the construction of a larger number is now in progress, so that, as the agent reports, every Ponca family will be comfortably housed before January. A very liberal allowance of agricultural implements and stock cattle has been given them, and if they apply themselves to agricultural work there is no doubt that their condition will soon be far more prosperous than it has ever been before. During the first year after their removal to the Indian Territory they lost a comparatively large number of their people by death in consequence of the change of climate, which is great to be deplored; but their sanitary condition is now very much improved. The death rate among them during the present year has been very low and the number of cases of sickness is constantly decreasing. It is thought that they are now sufficiently acclimated to be out of danger.

About the 1st of May last "Standing Bear," a chief of a band, with some twenty Indians, left the reservation in the Indian Territory to return to the Missouri River. As has always been done in similar cases, they were arrested at the request of this department to be taken back to their reservation. Application was made by citizens of Nebraska in the United States court at Omaha for a writ of *habeas corpus*, which was granted by the court, and Standing Bear and his followers were set at liberty. Efforts have been made in various places to raise a subscription for the purpose of testing in some way the question whether Indians can, by governmental action, be removed from lands once confirmed to them by treaty, and whether they can be arrested and returned to a reservation on which they have not by treaty bound themselves to remain. It would, perhaps, be well to have the rights of Indians defined and fixed by judicial decisions; but I do not think that, as seems to be believed by many people, such decisions will "solve the Indian question." The solution of the Indian question depends upon the civilization of the Indians and their ability to take care of themselves, to which "the definition of the Indians' rights" will probably contribute but very little. If judicial proceedings should result in spreading among the Indians the impression that they can leave their places of abode and roam about at pleasure, the effect would only be disastrous to them. If, for instance, the scheme which has been publicly advertised, to induce the Poncas, by emissaries sent among them, to leave their present reservation, with its houses and other improvements, where they are rapidly becoming acclimated, and to return to Dakota, where all this work would have to be done anew, should be carried out, it would probably injure only the Poncas themselves. This department has done all that was in its power to indemnify the Poncas for the wrong done them. No tribe of Indians has been more liberally cared for and provided with everything that can make them comfortable and prosperous. If all this should now be undone, and they be obliged to start afresh, it would be a matter for grave consideration whether the injury to them would not be much greater.

than a mere vindication of a right to a piece of land on the Missouri River could possibly remedy. Whatever might or should have been done, while their removal to the Indian Territory was still an open question, their present condition should not be left out of view in determining what is to be done now.

I have been informed on good authority that emissaries have also been sent among the Sioux in Southern Dakota, who are now contented, and have made a very hopeful beginning in doing useful work for themselves, for the purpose of "teaching them their rights," and inducing some of them to withdraw themselves from the authority of the government, and to leave their reservation so that another "test case" may be made up. Such schemes are mischievous and reprehensible, and should be disengaged and resisted by all well-meaning citizens. If they are set on foot in the name of philanthropy, it is a philanthropy most hurtful to those it pretends to benefit. True philanthropy will use every effort to accomplish that which is really best for the Indians, to make those who are well settled stay quietly where they are, avail themselves of the means offered for their improvement, cultivate their fields and take good care of their stock, devote themselves to useful work, send their children to school, and submit to the discipline which is necessary for their advancement in civilized life. This will be better for the Indians than an agitation calculated to divert their minds from that which is really needful.

GENERAL CONCLUSIONS.

On the whole, it may be said, notwithstanding the isolated disturbances which have occurred in Colorado and New Mexico, that the general temper and disposition of the Indians as to their willingness to work and to abandon the ways of savage life has greatly changed for the better. I do not mean to say we shall have no further trouble, but there is abundant evidence that at present the government possesses the confidence of the Indians in a greater measure than for a long time past, and that directions issued by the government are far more generally received by them with respect and obedience. We must not expect of them more than in the nature of things they are capable of doing. They must be treated not only with justice but also with patience. It may be necessary to repeat to some of them the same lesson again and again before they comprehend it, which requires persevering as well as intelligent work. But the progress made by some of the wildest tribes within my own official experience is most encouraging. When I entered upon my present duties I was told by men of long experience in Indian affairs that we would never be able to do anything with the Spotted Tail and Red Cloud Sioux "until they had received another thorough whipping." Since that time they have twice been obliged to change their location. A general outbreak was predicted a year ago. When I visited them this autumn I found their freighting wagons by hundreds on the road with their young warriors on the box, their chiefs with their people making

hay and cultivating fields on the bottom lands, many of them building houses for their families; anxious to have their children educated; many requesting that their boys and girls be taken to our schools in the East, and the universal wish to be permanently settled and led on "in the white man's way." Only one slight disorder interrupted their general good conduct. Similar things may be said of many other tribes. The rapid disappearance of game, which is to them a blessing in disguise, will greatly facilitate the introduction of civilized pursuits among several tribes which at present still prefer hunting to regular work. There is good reason to hope that if Congress will aid the carrying out of the policy above indicated by the enactment of legislation essential to its success, and if the citizens of the West will make up their minds to it that the Indians must have at least some land worth cultivating, we shall in another year make another long step toward that solution of the Indian problem which consists in so settling the Indians that they may become self-supporting, and that their presence among us will cease to be a disturbing element in American society.

In justice to the Indian service as at present constituted, I feel it my duty to say, that while it has been found necessary for the reformation of abuses to visit severe punishment not only on grave violations of duty, but even upon minor irregularities, and thus to make many removals and changes, such delinquencies have grown steadily less in number as well as gravity, and are now of very rare occurrence. Complaints, formerly so frequently heard, whether justly or unjustly, that supplies and annuity goods appropriated for by Congress and purchased for the Indians by the Indian Office, were not delivered to them, or that such goods and supplies were of bad quality, have almost entirely ceased.

It is a pleasant duty to acknowledge the valuable services rendered by the Board of Indian Commissioners in supervising the making of contracts and purchases, as well as the harmonious and effective co-operation of the War Department and the military authorities on all occasions when their assistance was requested.

PUBLIC LANDS.

The report of the Commissioner of the General Land Office gives an abstract of the operations of his office under the laws relating to the survey and disposal of public lands during the year ending 30th June, 1879.

During the year ending 30th June, 1879, public lands were disposed of as follows:

	Acre	%
For cash	622,573	96
A decrease of 254,981.18 acres, as compared with the previous fiscal year.		
Of this quantity 165,996.53 acres were entered under the desert-land act.		
Under homestead laws.....	5,260,111 -	29
An increase of 841,766.37 acres, as compared with the previous fiscal year.		
Under timber-culture laws.....	2,766,573 -	93

	Acrea.
An increase of 896,139.75 acres, as compared with the previous fiscal year.	
Agricultural-college scrip locations.....	960.00
Bounty-land warrant locations.....	50,820.00
A decrease of 33,900 acres as compared with the previous fiscal year.	
State selections:	
School indemnity	85,474.65
Internal improvements	81,400.46
Agricultural colleges	680.00
Salt springs.....	18,836.62
	186,391.73
A decrease of 28,600.80 acres as compared with the previous fiscal year.	
Scrip locations:	
Sioux half-breed scrip.....	1,879.05
Chippewa half-breed scrip.....	640.00
Valentine scrip.....	1,417.70
Porterfield scrip	240.00
Cole scrip	480.00
	4,656.75
Scrip located under acts of June 2, 1858, and June 22, 1860.....	87,573.44
An increase of 4,429.84 acres as compared with the previous fiscal year.	
Under the swamp act.....	75,388.08
A decrease of 127,537.77 acres.	
Certified for railroad purposes.....	278,334.11
A decrease of 328,006.54 acres.	
Total	9,333,383.29

A quantity greater by 647,204.41 acres than that disposed of the previous fiscal year. This increase is largely due to the greater quantity taken under the homestead and timber-culture acts.

The cash receipts were \$1,883,113.56, a sum less by \$139,418.60 than that received the previous fiscal year.

During the fiscal year 8,445,781.64 acres of public lands were surveyed, and 1,039,214.26 acres of private land claims, a quantity of public lands greater by 414,769 acres than that surveyed the previous year. The entire quantity surveyed is 734,591,236 acres, leaving of the public domain yet to be surveyed 1,080,197,686 acres.

The report of the Commissioner recites the appropriation for the survey of public lands and private land claims, and the distribution of the appropriation among the sixteen surveying districts. It also contains the report by the surveyors-general of surveying operations in their respective districts, and the statement that the boundary line between Colorado and Utah Territory has been surveyed and marked.

The applications for certified copies of patents, papers, &c., have greatly increased. As the compensation received for such copies under the law must be turned into the Treasury, the Commissioner suggests an amendment, so that the moneys received for such copies may be made applicable for the payment of copyists employed upon the work.

He suggests that abandoned military reservations that are found to

have no value greater than other lands should be disposed of under the general land laws. The lots contained in the Detroit Arsenal grounds, Michigan, can by law be sold only at public offering. So few of them have been sold as to render certain the fact that they were appraised at too high figures. He suggests that Congress provide for a reappraisement and the disposal at private sale at the appraised value of such lots as remain unsold after public offering. He renews his recommendation that Congress should take action as to railroad grants that have long since lapsed by non-completion of the roads, and either enforce a forfeiture of the lands granted or extend the time for the completion of the roads. As they now stand, large bodies of land are withheld from sale or entry, and there is no mode by which actual settlers can obtain title to them.

The consolidation of the pre-emption and homestead laws is again recommended by the Commissioner as demanded by the public interests.

He expresses the opinion that in view of recent decisions of the Supreme Court of the United States in the cases of Atherton *vs.* Fowler and Hosmer *vs.* Wallace, there should be additional legislation in order to protect settlers in good faith on the public lands.

These recommendations have the approval of the department.

DEPREDATIONS ON THE PUBLIC TIMBER LANDS.

I deem it my duty again to invite the attention of Congress to the depredations committed on the timber lands of the United States and the necessity of the enactment of laws calculated to arrest the indiscriminate destruction of our forests, especially in the mountainous regions of the country. Since my last annual report the only action taken by Congress toward the suppression of timber depredations consisted in the appropriation of \$40,000, provided for by the act of March 3, 1879. Under this appropriation a maximum force of fifteen special timber agents was employed to investigate trespasses in the various public land States and Territories. These agents were from time to time transferred from one field to another as it was thought that they could best serve the public interests.

The labors of these agents have been fruitful of good results in two directions: first, in collecting testimony for the prosecution of trespassers and for the recovery of the value of timber unlawfully taken from the public lands. It was predicted by many opponents of the policy pursued in this respect by the department that the cost of the investigations and prosecutions would not be covered by the proceeds, and that therefore the money appropriated and spent for this purpose would in great part be money thrown away. This prediction has not been justified by results. The sum covered into the Treasury during the last fiscal year on account of timber depredations was largely in excess of the sum appropriated, and a considerable number of cases is still pending in the courts.

awaiting trial, which will, when judgment is obtained, very much increase the amount already recovered. The details are presented in the report of the Commissioner of the General Land Office. The prosecution of depredators on the public timber lands has, therefore, been a well-paying business to the government.

This, however, is the least important result of the operations of the department in this respect. Of far greater consequence is the fact that the investigation of trespasses and the prosecution of depredators, carried on with vigor and earnestness, although with very limited means, have created in some of the localities where the depredations had been most extensive, a wholesome respect for the law, and strengthened the desire of good citizens, who have the interests of the country at heart, to see the unlawful destruction of the public timber cease. It is indeed gratifying to observe that the interest in this important question which the measures adopted by the government have awakened, and the discussions which have followed, have greatly weakened the opposition which existed at the beginning to the policy pursued by this department. Even in the States and Territories where the timber necessary for domestic and business purposes can be obtained only from the public lands, unless imported from a distance, a healthy public opinion seems to be springing up which recognizes that an indiscriminate destruction of the forests, and especially the denudation of the mountain slopes of the timber growth covering them, must inevitably result in incalculable and irreparable injury to the economical interests of those States and Territories, and become ultimately destructive to the prosperity of their people.

This is an observation which by painful experience has forced itself upon every civilized nation on earth; and it is to be hoped that the American people will become mindful of it while it is yet time to remedy the evil already wrought by the reckless improvidence which has so far prevailed.

While the measures taken by this department have undoubtedly produced a good effect in many localities, it must be kept in mind that the limited means allowed by Congress permitted only a comparatively small field to be covered by its operations. The greatest danger of a wholesale destruction of our forests, and of the disastrous consequences that destruction will bring after it, exists in those States and Territories where the timber indispensably required for domestic use and local industry must be taken from the public lands, there being no timber lands in private possession, and the public lands being mostly unsurveyed and not subject to purchase or entry.

In my last annual report I discussed the inadequacy of the laws enacted by the last Congress "authorizing the citizens of Colorado, Nevada, and the Territories to fell and remove timber on the public domain for mining and domestic purposes," and providing "for the sale of timber lands in the States of California and Oregon and in Washington Territory." The opinion I then ventured to express, that the first of these acts would be

taken advantage of not only by settlers and miners to provide economically for their actual current wants, but by persons who would see in this donation a chance to make money quickly: that it would stimulate a wasteful consumption beyond actual need and lead to wanton destruction, and that the machinery left to this department to prevent or repress such waste and destruction through the enforcement of rules to be made by the Commissioner of the General Land Office would be found insufficient for that purpose, has already in many places been verified by experience; also the predictions made by the Commissioner of the General Land Office with regard to the effect of the second one of the above-named acts. Referring to what was said about these laws in my last annual report, I repeat my earnest recommendation that they be repealed, and that more adequate legislation be substituted therefor.

It is by no means denied that the people of the above-named States and Territories must have timber for their domestic use as well as the requirements of their local industries. Neither is it insisted upon that the timber so required should be imported from a distance, so that the forests in those States and Territories might remain intact. This would be unreasonable. But it is deemed necessary that a law be enacted providing that the people may lawfully acquire the timber required for their domestic use and their local industries from the public lands under such regulations as will prevent the indiscriminate and irreparable destruction of forests, with its train of disastrous consequences. It is thought that this end will be reached by authorizing the government to sell timber from the public lands principally valuable for the timber thereon, without conveying the fee, and to conduct such sales by government officers under such instructions from this department as will be calculated to prevent the denudation of large tracts, especially in those mountain regions where forests once destroyed will not reproduce themselves. I have no doubt that under such a law, well considered in its provisions, the people of those States and Territories would be enabled to obtain all the timber they need for domestic as well as industrial purposes at reasonable rates, and that at the same time the cutting of timber can be so regulated as to afford sufficient protection to the existence and reproduction of the forests, which is so indispensable to the future prosperity of those regions. I venture to express the opinion that the enactment of such a law has become a pressing necessity, and cannot much longer be delayed without great and irreparable injury to one of the most vital interests of the people. I therefore again commend to the consideration of Congress the bill introduced as Senate bill No. 609 in the last Congress.

The subject of the destruction of forests by fire also calls for early and earnest attention. In most, if not all, of the States where timber lands are in private possession, the setting of fires in them is made a highly penal offense by statute. But there is no law of the United States providing specifically for the punishment of such offenses when committed on the

public lands. It is a matter of experience that such fires on the public lands of the Western States and Territories are sometimes set by Indians, but in a majority of cases by hunters, mining prospectors, and tourists who negligently leave their camp-fires burning when moving from place to place, as well as by persons who deliberately set timber on fire for the purpose of deadening and thus preparing it for particular use. It is evident that larger areas of timber land are devastated by such fires than by all other kinds of depredation, and this is probably true. I therefore repeat the recommendation made in my first annual report, that a law be enacted prescribing a severe penalty for the willful or negligent setting of fires upon the public lands of the United States, and also for the recovery of all damages thereby sustained. It may in many cases be difficult to obtain the testimony necessary for the conviction of persons guilty of this offense; but if the law is successfully enforced only in some instances, it will serve to direct general attention to the danger to which any one who willfully or negligently sets fire to public timber exposes himself, and thus to make many persons, who so far have given no thought to the possible consequences of their negligence or recklessness, more careful in the future.

I would also repeat the recommendation made in former reports that the President be authorized to appoint a commission, composed of qualified persons, to study the laws and practices adopted in other countries for the preservation and cultivation of forests, and to report to Congress a plan for the same object, applicable to our circumstances. The time is fast approaching when forest-culture will be to the people of the United States as important a question as it is in older countries; and then it will be a subject of painful wonder to thinking men, how it could have been so long neglected.

REDWOOD AND BIG TREES OF CALIFORNIA.

The waste and destruction of the redwood (*Sequoia sempervirens*) and "big trees" (*Sequoia gigantea*) of California have been and continue to be so great as to cause apprehension that these species of trees, the noblest and oldest in the world, will entirely disappear unless some measure be soon taken to preserve at least a portion of them. I am informed that in the more inaccessible sections of the coast range in the northern and on the west side of the Sierra Nevada Mountains in the southern section of California, some forests of these trees still remain, that may and should be preserved, either wholly or at least in part. The importance of preserving these species of trees in sufficient quantity to serve to this and coming generations as an illustration of the magnificence of the grandest of primeval forests, is so great as to have attracted the attention of men of science in both Europe and America, from some of the most eminent of whom I have received communications on this subject. It is especially desirable that the big trees in the above named localities be preserved, as the "Mariposa Grove" now celebrated for

specimens of that species, is small and many of the large trees in it are injured by fire.

I would therefore recommend that the President be authorized to withdraw from sale or other disposition an area at least equal to two townships in the coast range in the northern, and an equal area in the southern part of the State of California, the precise form and location of the tracts to be determined at his discretion.

PRIVATE LAND-CLAIMS.

In each of my annual reports I have called your attention to the necessity for legislation by Congress, providing a way for the more speedy settlement of the private land-claims in the territory (except California) acquired from Mexico by the treaty of Guadalupe Hidalgo in 1848, and the Gadsden treaty of 1853, than is now provided by law.

The reasons for asking such legislation are—

First. The slow progress made under existing laws in the settlement of said claims.

Second. The large number of claims still remaining unsettled, covering large tracts of land which interfere with and retard the sale and disposal of the public lands.

Third. The want of harmony between the land system of the United States and the system under which said grants were made, which engenders strife and conflict between the land claimants and settlers.

No law has thus far been enacted by Congress to provide a more speedy settlement of such claims since I first called your attention to the subject, although several bills have been introduced looking to that end.

All of the reasons to which I have heretofore invited your attention still exist, and the rapid settlement of said territory, both for agricultural and mining purposes, has greatly intensified the necessity for such a law.

GEOLOGICAL SURVEY.

Under the provisions of an act of Congress approved March 3, 1879—the Geological and Geographical Survey of the Territories, and the Geographical and Geological Survey of the Rocky Mountain Region, hitherto conducted under the supervision of the Department of the Interior, were discontinued on the 30th of June, 1879. The office of Director of the Geological Survey was established by the same act, and \$100,000 were appropriated for the expenses of said survey and for the classification of the public lands and examination of the geological structure, mineral resources, and products of the national domain, to be expended under the direction of the Secretary of the Interior.

In accordance with the provisions of the act, the President appointed, by and with the advice and consent of the Senate, Mr. Clarence King, a gentleman eminently qualified, to conduct the survey. No report can yet be made of his operations in the field; but advices received indicate a season of successful labor and satisfactory results.

PUBLIC LANDS COMMISSION.

The act of March 3, 1879, authorized the appointment by the President of three persons, to form, in connection with the Commissioner of the General Land Office and the Director of the Geological Survey, a commission on the codification of existing laws relating to the survey and disposition of public lands. It was made the duty of the commission to report to Congress within one year from the time of its organization: First, a codification of the present laws relating to the survey and disposition of the public domain; second, a system and standard of classification of public lands, as arable, irrigable, timber, pasturage, swamp, coal, mineral lands, and such other classes as may be deemed proper, having due regard to humidity of climate, supply of water for irrigation, and other physical characteristics; third, a system of land parceling surveys adapted to the economic uses of the several classes of lands; and fourth, such recommendations as they may deem wise in relation to the best method of disposing of the public lands of the western portion of the United States to actual settlers.

The following named gentlemen were appointed as members of the commission July 1, 1879: J. W. Powell, A. T. Britton, Thomas Don-aldson. The commission, consisting of the above named, together with Commissioner of the General Land Office and Director of the Geological Survey, organized on the 8th of July last, and has since been continuously at work discharging the duties imposed by the law.

The commission has visited all the Territories and the Pacific States, and taken much testimony as to the character and the classification which should be made of the public lands in the various localities visited.

It is believed by the commission that it will be able to report on the classification of the lands, and the proposed changes in the laws for the survey and sale of the same, on or about January 1, 1880. The work of codifying existing land laws will require a much greater length of time for its completion.

BUREAU OF RAILROAD ACCOUNTS.

The report of the Auditor of Railroad Accounts herewith presented gives an abstract of the operations of his office under the laws relating to indebted Pacific Railroad Companies and certain Land-grant Railroad Companies during the fiscal year ending June 30, 1879.

The necessity which existed for the creation of this bureau was pointed out in my last annual report, and is more fully shown by the experience of last year.

It is suggested by the Auditor in regard to the accounts for services performed by the Pacific Railroad Companies that they be referred by the several accounting officers to this Department or to the First Auditor of the Treasury for revision, record, and report, before payment is

made, for the reason that only in this or some similar way the interests of the government in this respect can be protected or a statement of the account between these companies and the United States be given.

In performing his duties under the law the Auditor has, during the last fiscal year, traveled over many thousand miles of railroad.

In passing over these railroads and examining into their condition, he has found the strongest evidence of returning prosperity and increased immigration in the Western and Pacific States. The many rapidly-growing new settlements insure permanent improvement to the business of both the railroads and the adjacent country.

The growth of towns is mentioned by him as the result of a liberal policy and effort of the western railroad companies—showing what the cultivation of good relations between the railroads and the people may accomplish.

These efforts of the railroad companies as well as the yearly increasing harvests, the great development of the mineral wealth of the West, and the returning confidence in the stability of values, constitute mainly, in his opinion, the basis of the improvement in the business of the railroads.

The increase of construction, business, and profit, during the year 1878 is shown to have been particularly large on the railroads west of the Mississippi; as to railroad construction, it is stated that for ten months, ending October 31, 1879, there were built in the United States 2,900 miles of new railroad, of which over 2,000 miles were west of the Mississippi, while the average new construction for the five years previous—taking, of course, only the first ten months of each year—amounted to only 1,600 miles.

It is remarkable, however, that, notwithstanding the large increase of population in the West, the facilities afforded for travel, reduction in rates, and a general increase in railroad business, *passenger traffic has decreased*, indicating, as the auditor believes, either that the people could not afford to travel, or that the railroad companies have not yet solved the problem of passenger transportation.

The regular work of reporting to the Auditor's office by the railroad companies has been simplified and reduced to a single semi-annual return, and the great desirability to the railroad companies themselves is pointed out of keeping their books and accounts in such a manner as to be able to make full and satisfactory reports, since it will enable them to know just what it costs to do certain work, where to retrench, or where to improve.

In this regard the Auditor deems it well if some line were drawn either by State or National authority, so that certain information, absolutely necessary for a stockholder or creditor to know the condition of a company's property and affairs, or such as may be required for the Census or State and National legislatures can be easily and promptly furnished. Reports of railroad companies, if not uniform as to time or facts, are almost valueless for publication or comparison.

In order to protect the interests of the government, it has been found necessary that the Pacific Railroad Companies keep separate accounts the business of the subsidized and unsubsidized portions of their roads, and the Auditor has therefore required them to be so kept.

A compendium of the laws of the United States relating to the Pacific Railroad Companies has been made and appended to the report, which will be valuable for reference in all the departments of the government.

The more important decisions of the Supreme Court of the United States in cases affecting the Pacific Railroad Companies are printed in full in his report, as well as a synopsis of the decisions in all other cases relating to them.

The Atchison, Topeka and Santa Fé Railroad Company has a suit against the United States now pending in the Court of Claims, relating to the question of the amount of deduction to which the government is entitled for the use of its railroad free of toll or other charge. The Union Pacific also has a suit pending in the same court touching the right of the United States to fix the rate of compensation for carrying the mails on the Pacific Railroad. When these questions are finally determined the Auditor sees no cause for further contests before the courts, and no reason why the relations between the government and the subsidized and land-grant railroads should not be such as to secure to the government service by the railroads at the lowest rates, and to the railroad companies prompt settlement and payment for the same.

It appears that to March 3, 1871, over two hundred million acres of the public lands had been granted to States and corporations for railroad purposes, of which over forty-four million acres have been patented, and of which more than thirty-one million acres were for railroads "in whole or in part west, north, or south of the Missouri River."

The money value of these thirty-one million acres of land, at the average price heretofore obtained, the Auditor states to be over one hundred and forty million dollars. He deems it questionable, in view of the conditions attaching to these grants, whether their proceeds can be used for any other purpose than the construction of the railroad for which the grant was made (as, for distribution among the stockholders, or in building other railroads), and calls attention to the further fact that the laws making such grants provide that the United States mail shall at all times be transported at such price as Congress may by law direct.

The amount of the United States bonds issued to the Pacific Railroads is \$64,623,512; the miles of railroad so subsidized is 2,495.0525; and the average of this money subsidy is \$25,900.66 $\frac{2}{5}$ per mile.

The miles of railroad subsidized by land grants under the Pacific Railroad acts—the Pacific Railroad and branches—are 3,035.85; the quantity of land already patented to the companies being 6,517,075.04 acres, the money value of which at \$5 per acre is \$32,585,375.20, or \$10,733.52 per mile.

The principal of the bonds issued to the Pacific Railroad Companies is.....	\$64,623,512 00
Interest at 6 per cent. to June 30, 1879.....	43,712,450 58
Total, principal and interest.....	\$108,335,962 58

The total amount of compensation for services rendered by the companies covered into the Treasury to June 30, 1879, was.....	\$12,915,591 27
Of which there is applicable to payments of bonds and interest.....	8,387,296 78
To payment of 5 per cent. net earnings.....	4,201,348 50
To payment into sinking fund.....	326,945 99

The interest belonging to the sinking fund was \$1,202.50, and the total balance against the railroad companies was \$95,419,168.81.

The amount due by the government on December 31, 1878, and withheld from the Union and Kansas Pacific Companies on account of transportation, will more than offset the \$2,737,576.85 payable by them on account of the "five per cent." of their net earnings; but of the amount payable by the Central Pacific, \$1,978,688.38, the amount withheld for transportation is insufficient by the sum of \$648,271.96*, payment of which amount in cash the Auditor has required of the company.

The result of the "5 per cent." suit against the Union Pacific Railroad Company has been that the United States obtained judgment for \$1,208,337.34, which is \$1,029,547.08 more than the company admitted to owe; and the result of the examination of the accounts of the Central Pacific, undertaken by the Auditor immediately after the decision of the "sinking-fund case" by the Supreme Court, has been that the amount due by that company from November 6, 1869, to December 31, 1878, is \$1,978,688.38, or \$745,391.86 more than the company's own statement admitted.

It is considered important that the sinking fund be credited promptly with all transportation moneys to which it is entitled; otherwise the companies will have just cause for complaint, as the act requires money deposits by the companies to be made at a given time in each year.

Under the present practice of the departments, by which many of these accounts do not even reach the accounting-officers by the time named in the act, it will be almost impossible for these settlements to be consummated within the period stated in the act—namely, calendar-year settlements—to be made by the first day of February in the following year.

Mr. A. B. Nichols, of Philadelphia, was appointed to the position of railroad engineer in the office of the Auditor of Railroad Accounts on August 18, 1879, and has since then examined into the condition of the subsidized and land-grant railroads. His report is given with that of the Auditor.

During the annual inspection it was found that improved business, especially on the Western roads, had induced great improvement in the

*This amount has been already deposited in the Treasury by the Central Pacific Railroad Company.

condition of road-bed, track, bridges, and equipment of the railroads visited.

Many defects have been pointed out by the engineer, which it is expected the companies will remedy. The general condition of the Pacific Railroads is better than was anticipated.

Since 1876 the local business on all of these railroads has improved, but more particularly on the Kansas Pacific, the Central Branch Union Pacific, the Atchison, Topeka and Santa Fé, and the Burlington and Missouri River Railroads, located in the States of Kansas and Nebraska.

	In 1876.	In 1878.
The gross earnings of the Central Branch Union Pacific being	\$172,852 68	\$624,953 77
The gross earnings of the Atchison, Topeka and Santa Fé being	2,486,582 67	3,950,868 09
The gross earnings of the Burlington and Missouri River Railroad, about	900,000 00	1,921,350 00

The Auditor further shows, by a statement regarding the business of most of the railroads in the United States, that while the gross earnings of these roads for the year 1878 increased about $3\frac{1}{2}$ per cent. over those of 1877, the increase of net earnings was nearly $9\frac{1}{4}$ per cent., indicating greater economy in operating expenses.

UNION PACIFIC RAILROAD.

The report of the engineer shows that the line and grade of the Union Pacific Railroad, and the road-bed and track, can be improved in many respects.

The road has now 460 miles of track laid with steel. Iron bridges are being substituted for wooden. The equipment of the road is in good condition, and a full supply of every kind on hand.

About 30 percent of the operating expenses, that is to say, \$1,654,795.82, were expended during the calendar year of 1878 on the maintenance of way, bridges, and buildings.

It is contemplated to build a new passenger depot at Ogden, and to improve the arrangement of yard, engine-houses, and shops.

Among the most valuable assets of this company are its coal mines at Carbon, Almy, and Rock Springs, the product of which it will be to the interest of the company to furnish at the lowest rate possible to settlers on its line.

The Union Pacific Railroad Company furnishes reports from which the following statements are derived:

Length of subsidized line	1,038.68
Leased to Central Pacific	5.00
Operated by Union Pacific	1,033.68

The company owns :

Locomotives	172
Passenger cars	124
Baggage, mail, and express cars	41
Freight and other cars	3,216

And its reports show:

Stock subscribed.....	\$36,78
Stock issued.....	36,76
Par value.....	
United States subsidy bonds.....	27,23
Other funded debt.....	50,18
Total stock and debt	114,18
Floating debt and interest accrued to June 30, 1879, on subsidy and other bonds.....	17,09
Bonds and stock of, and investments in other companies.....	<u>\$6,97</u>
Material on hand.....	\$87
Cash on hand	93
Accounts receivable.....	3,52
	<u>\$5,33</u>
Cost of road, equipment and Missouri River bridge, as per company's books	\$120,47
Earnings, year ending June 30, 1879—Passenger	\$3,12
Freight.....	8,39
Miscellaneous.....	1,37
Total earnings	\$12,90
Operating expenses.....	5,39
Net earnings	<u>\$7,50</u>
Interest paid	\$4,23
Dividends paid.....	\$1,66
Acres land unsold.....	10,46
The Auditor further states that under the act of May 7, 1878, per cent. of net earnings for the year ending June 30, 1879, would follows :	
Ordinary net earnings.....	\$7,50
Less interest on first mortgage bonds.....	1,63
Net earnings under the law.....	<u>\$5,87</u>
One-half transportation applied to interest.....	\$53
One-half transportation to sinking fund	53
Five per cent. under acts of 1862 and 1864 applied to interest.....	29
Additional payment under act of May 7, 1878, for sinking fund.....	9
Total: twenty-five per cent. of net earnings.....	<u>\$1,46</u>
Under the laws in force to June 30, 1878, there would have been—	
Retained half transportation	\$53
And five per cent. net earnings.....	37
Total	<u>\$91</u>

It appears also that, under the sinking fund act, the net surplus disposal of the company for the last fiscal year after payment of it and dividend would be \$725,010.07.

Your attention is also invited to the recommendations and vi

the Auditor regarding money invested by this company in branch railroads, its express business, Pullman sleeping-car arrangement, and to the suggestion that the company should run a fast through mail and passenger train.

CENTRAL PACIFIC RAILROAD.

The Central Pacific Railroad Company has, since the last report of the Auditor, complied with the law and furnished such statements as have been required. From these statements it appears that—

The number of miles subsidized is.....	860.66
The number of miles operated	2,323.61
Locomotives owned, 227; leased, 35; total	262
Passenger cars owned, 261; leased, 37; total.....	298
Baggage, mail, and express, cars owned, 56; leased, 12; total.....	68
Freight and other cars owned, 4,641; leased, 887; total	5,528
Stock subscribed	\$62,608,800 00
Par value of shares.....	100 00
Stock issued	\$54,275,500 00
Subsidy bonds	\$27,855,680 00
Funded debt	56,394,000 00
Floating debt	6,936,089 00
Interest due and accrued on funded debt	1,608,438 00
Balance of interest due and accrued on United States bonds.....	16,089,537 00
Total debt	\$108,883,744 00
Total stock and debt	\$163,159,244 00
Cost of road proper	\$134,921,352 00
Equipment	8,014,644 00
Real estate	1,499,432 00
Total cost of road and equipment, &c.....	\$144,435,428 00
Cash, materials, and sinking funds.....	\$6,256,374 00
Bonds and stocks.....	162,044 00
Miscellaneous investments	2,502,975 00
For year ending June 30, 1879:	
Passenger earnings.....	\$5,185,802 00
Freight earnings	10,655,733 00
United States mail	507,040 00
Miscellaneous earnings	1,263,106 00
Total	\$17,611,681 00
Operating expenses	8,730,384 00
Ordinary net earnings	\$8,881,297 00
Interest paid.....	\$3,747,666 00
Lands unsold (acres)	11,464,575
Transportation withheld in excess of the amounts authorized to be retained under the acts of July 1, 1862, and July 2, 1864.....	\$1,454,268 44

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Under the laws in force to June 30, 1878, there would have been—	
Retained half transportation	\$53
And five per cent. net earnings.....	37
Total	<u>\$913</u>

It appears also that, under the sinking fund act, the net surplus disposal of the company for the last fiscal year after payment of interest and dividend would be \$725,010.07.

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Due United States on account of 5 per cent. of net earnings to June 30, 1878	\$1,871
Same to December 31, 1878	107
Due United States on account of transportation requirement for sink- ing fund, under act May 7, 1878	123
Duo United States as additional payment to make 25 per cent. of net earnings under act of May 7, 1878.....	*181
Total due United States	<u>\$2,283</u>

Further details as to the settlement of these accounts and the d
ties under which they were made are given in the Auditor's repor

From the statement of the engineer it appears that many tunn
this road should be improved by masonry lining instead of timber
track and road-bed are in good condition; and that many bridge
much of the trestle work need renewing and improving.

The Auditor highly commends the hospital of the company at
mento, and the service and condition of the great snow gallery c
Sierra Nevada Mountains extending over 28 miles.

The equipment of the road is in good condition. The remarks
Auditor regarding second-class sleeping-cars, ferry service of the
pany between Oakland and San Francisco, the filling up of a port
the long wharf at Oakland, and the new mammoth train transfer st
“Solano,” the sleeping and parlor car business, and increase of
are also interesting and worthy of consideration.

Particular attention is invited to the fact that the total amount
5 per cent. of the net earnings, as ascertained by the Auditor, fro
ember 6, 1869, to December 31, 1878, is \$1,978,688.38, or \$745,39
excess of the company's statement; also to the fact, quite as imp
that the money is all in the Treasury of the United States.

KANSAS PACIFIC RAILWAY.

The Kansas Pacific Railway Company have continued to make r
as called for.

Miles road operated	
Miles owned.....	
Miles subsidized with lands	
Miles subsidized with bonds	
Number of locomotives	
Passenger-cars.....	
Baggage, mail, and express-cars	
Caboose-cars	
Freight and other cars	
Stock subscribed.....	\$9,992
Par value of shares.....	
Stock issued	\$9,689
Subsidy bonds	\$6,303

* This amount has been already deposited in the Treasury by the Central
Railroad Company.

Funded debt	\$22,130,100 00
Floating debt	1,219,080 00
Interest on funded and floating debt	5,621,366 00
Interest on subsidy bonds	2,291,702 00
 Total debt	 <u>\$37,565,248 00</u>
Stock and debt	\$47,255,198 00
Cost of road and equipment	<u>\$34,359,540 00</u>
 Passenger earnings for year ending June 30, 1879	 \$1,005,900 59
Freight earnings	3,033,421 50
Miscellaneous earnings	<u>246,861 62</u>
 Total	 <u>*\$4,286,183 71</u>
Operating expenses	\$2,327,925 51
 Net earnings	 <u>\$1,958,258 20</u>
Interest paid	\$1,180,043 00
Acres of land unsold	4,569,483

This company having defaulted in the payment of interest on its bonds, receivers were appointed and operated the road from November 21, 1876, to June 17, 1879, since which time it has been operated by the Union Pacific Railroad Company. The road is reported in good condition, wooden bridges being replaced by iron ones, and transportation service prompt and safe.

The company operates its own Express, but runs Pullman sleeping-cars. Its account with the United States regarding 5 per cent. of net earnings and the half transportation compensation withheld has not yet been adjusted.

CENTRAL BRANCH UNION PACIFIC RAILROAD.

This company has rendered but very meager reports, which, with other information, show the following facts: Miles operated, 100; miles operated under lease, 158; gross earnings, \$624,953.77; operating expenses, \$360,630.52; net earnings, \$264,323.35; amount expended for new equipment, \$140,000; rentals of leased lines, \$66,000; taxes, \$24,000.

The engineer's report shows that the subsidized line of this company is not in good condition and that it is not up to the standard required, many bridges requiring immediate attention. The building of branch roads during the last two years has so increased its business that large additions to equipment have been required.

The transportation account and the 5 per cent. account of this company are still unsettled.

SIOUX CITY AND PACIFIC RAILROAD.

The condition of the property of this company in Iowa is reported as good, but the condition of the property in Nebraska is reported as inferior, requiring immediate and extensive repairs. The reports of the company show length of road operated, 158.13 miles; road owned, 107.04;

subsidized line, 101.77; number of locomotives, 13; number of passenger cars, 10; number of baggage, mail, and express cars, 5; number of freight and other cars, 194.

Stock subscribed, \$2,068,400; stock issued, \$2,068,400; funded debt, \$1,628,000; subsidy bonds, \$1,628,320; floating debt, \$126,283; accrued interest on funded debt, \$50,115; accrued interest on subsidy bonds, \$981,753; total debt, \$4,414,451; stock and debt, \$6,482,851; cost of road, \$5,350,138. Passenger earnings for the year ending June 30, 1879, \$86,187; freight earnings, \$185,640; miscellaneous earnings, \$81,502; total earnings, \$353,329; operating expenses, \$247,173; net earnings, \$106,156; interest paid, \$110,695; deficit, \$4,539.

TEXAS AND PACIFIC RAILWAY.

The usual report of this company for the year ended June 30, 1879, to this department was received and referred to the Auditor of Railroad Accounts on October 25, 1879. The company owns and operates 443.86 miles of road. Number of locomotives, 49; passenger cars, 29; baggage, mail, and express cars, 13; freight and other cars, 972. Stock issued, \$6,996,000; par value, \$100. Funded debt, \$19,123,406; floating debt, \$1,278,813; unpaid interest, \$292,595; total debt, \$20,694,814; stock and debt, \$27,690,814. Cost of road, \$26,906,901. Passenger earnings, \$456,576; freight earnings, \$1,582,926; miscellaneous earnings, \$96,641; total earnings, \$2,136,143; operating expenses, \$1,397,514; net earnings, \$738,629; interest paid, \$712,417. Lands unsold granted by State of Texas, 4,756,130 acres.

SOUTHERN PACIFIC RAILROAD.

From reports made to the Auditor regarding this road the following figures are obtained: Miles operated, 161.14; miles owned, 711.95; leased to Central Pacific, 550.81 miles; number of locomotives, 44; passenger cars, 62; baggage, mail, and express cars, 18; freight and other cars, 1,157. Stock subscribed, \$36,763,900; stock issued, \$36,477,000. Funded debt, \$29,186,000; floating debt, \$963,068; accrued interest on funded debt, \$409,410; total debt, \$30,558,478; stock and debt, \$67,035,000. Cash, material, and accounts due, \$219,889. Cost of road, \$64,813,154; cost of equipment, \$1,902,124; total cost of road and equipment, \$66,715,278. Passenger earnings, \$477,925; freight earnings, \$471,262; miscellaneous earnings and rent of road, \$3,350,208; total earnings, \$4,299,395; operating expenses, including taxes and insurance, \$2,588,297; net earnings, \$1,711,098; interest paid, \$1,890,237. Lands unsold, 9,245,118 acres.

NORTHERN PACIFIC RAILROAD.

This company furnishes the Auditor with statements as follows: Miles of road operated, 720; miles owned, 560. Stock authorized, \$100,000,000;

Common stock issued, \$27,812,700; preferred stock issued, \$46,346,094; total stock issued, \$74,158,794. Number of locomotives, 55; number of passenger cars, 23; baggage, mail, and express cars, 11; freight and other cars, 1,303. No funded debt. Preferred stock unissued used as collateral for moneys borrowed; floating debt, \$974,019; stock and debt, \$5,132,813. Cost of road, \$20,931,966; earnings ten months to June 1, 1879, \$1,167,262; operating expenses, \$711,464; net earnings, \$455,798. Lands unsold, 44,687,781 acres.

SAINT LOUIS AND SAN FRANCISCO RAILWAY.

This company's reports furnish the following information: Miles operated, 472.05; miles owned, 292.5. Number of locomotives 29; number of passengers cars, 10; baggage, mail, and express cars 8; freight and other cars 836; Stock issued, \$21,642,100; funded debt, \$5,292,000; floating debt, \$73,436; unpaid interest, \$216,999; total debt, \$5,582,435; stock and debt \$27,224,535; cost of road, \$26,198,626; cost of equipment, \$729,166; cost of road and equipment, \$26,927,792. Passenger earnings to December 31, 1878, \$195,133; freight earnings, \$947,378; miscellaneous earnings, \$59,140; total earnings, \$1,201,651; operating expenses, \$598,134; net earnings, \$603,517; interest paid, \$546,965. Acres of land unsold, including grant to Atlantic and Pacific Railroad, 41,784,253.

BURLINGTON AND MISSOURI RIVER RAILROAD IN NEBRASKA.

This company has neglected to make reports. The Auditor furnishes the following figures from other sources: Miles operated, 443; miles owned, 190.5. Number of locomotives, 29; passenger cars, 16; baggage, mail, and express cars, 12; freight and other cars, 1,230. Stock issued, \$9,390,800; funded debt, \$10,933,300; floating debt, \$629,581; unpaid coupons, \$255,222; total debt, \$11,818,103; stock and debt, \$21,208,903; cost of road and equipment, \$20,541,852. Earnings for the year ending December 31, 1878: From passengers, \$352,000; from freight, \$1,385,000; miscellaneous earnings, \$184,350; total earnings, \$1,921,350; operating expenses, \$618,677; net earnings, \$1,302,673; interest paid, \$673,798; dividends, \$241,512. Acres of land unsold estimated 1,000,000.

DENVER PACIFIC RAILROAD.

From reports made by the receiver of this road, the following figures are given: Miles of road operated, 132.89; road owned and subsidized with lands, 105.89. Number of locomotives, 6; passenger cars, 4; baggage, mail, and express cars, 3; freight and other cars, 75. Stock subscribed and issued, \$4,000,000; funded debt, \$2,271,000; floating debt, \$173,130; total debt, \$2,444,130; total stock and debt, \$6,444,130. Cost of road, \$6,495,350; passenger earnings to June 30, 1879, \$60,965.57; freight earnings, \$106,887.47; miscellaneous earnings, \$20,737.46; joint traffic earnings, \$64,265.44; total earnings, \$252,855.94; operating expenses, including taxes, \$113,346.75; net earnings, \$139,509.19. Acres of land unsold, 908,347.95.

OREGON AND CALIFORNIA RAILROAD.

From reports made by this company and other sources the following figures are given: miles subsidized, estimated at 300; miles operated, 200; number of locomotives, 14; passenger cars, 11; baggage, mail, and express cars, 4; freight and other cars, 215; par value of shares, 100; stock issued, \$20,000,000; funded debt, \$10,950,000; floating debt, \$800,000; total debt, \$11,750,000; total stock and debt, \$31,750,000; cost of road, \$4,806,208.98; cost of equipment, \$499,497.64; cost of real estate, \$189,907.64; passenger earnings, \$232,860.76; freight earnings, \$345,482.17; express and mail earnings, \$30,414.60; miscellaneous earnings, \$39,359.35; total earnings, \$648,116.88; operating expenses, including taxes, \$410,451.03; net earnings, \$237,665.35.

OREGON CENTRAL RAILROAD.

From reports furnished and other sources the following is compiled: Miles subsidized and operated, 47.50; number of locomotives, 4; passenger cars, 2; baggage, mail, and express cars, 2; freight and other cars, 42; stock subscribed, \$5,000,000; par value of shares, 100; stock issued, \$4,980,050; funded debt, \$4,695,000; floating debt, \$1,189,002.72; total debt, \$5,884,002.72; total stock and debt, \$10,864,052.72; cost of road, \$1,202,262.97; passenger earnings, \$26,001.60; freight earnings, \$41,460.07; miscellaneous earnings, \$2,658.93; total earnings, \$70,120.60; operating expenses, including taxes, \$69,849.82; net earnings, \$270.78.

APPENDIX, RECOMMENDATIONS, ETC.

The Auditor's report is accompanied by an appendix, containing statements and compilations of facts relating to the Pacific and Land-grant railroad companies, the laws affecting them, statements of the affairs of the companies, their receipts, expenditures, and operations, the accounts between the United States and the Pacific Railroad Companies, the condition of the respective land grants, and other matters of general interest to railroad companies.

The Auditor submits several recommendations of importance, to which attention is invited. He recommends that the Pacific Railroad acts be amended so that any of these companies which may abandon any portion of the subsidized railroad, or which may divert their business from a subsidized to an unsubsidized railroad, be required to transfer the lien and condition attached to the subsidized to the new and unsubsidized line, in order that the interests and rights of the United States may be protected; or, if that is not done, that all through traffic be required to be done only on the subsidized line.

The question involved is a new one and seriously affects the rights of the United States.

Another recommendation is submitted relative to the practical working of the sinking-fund act approved May 7, 1878. It appears that it will

be impossible to have the settlements made as contemplated under the provisions of that act in time for the money requirements to be paid into the Treasury by the first day of February in each year; the Auditor therefore recommends that the day be changed to the first day of April in each year; and also that the settlements and payments for the sinking fund be required to be made semi-annually instead of annually.

He further recommends that the investments of the sinking-fund be authorized to be made in the first-mortgage bonds of the respective companies, or in such United States bonds as the Secretary of the Treasury may select.

Sinking funds are also recommended by him to be established for the Kansas Pacific, Central Branch Union Pacific, and Sioux City and Pacific Railroad Companies.

In order to prevent misunderstanding as to the locality of his office, and to make the title uniform with those of other bureau officers of this department, it is recommended that the title of the office of the Auditor of Railroad Accounts be changed to "Commissioner of Railroad Affairs."

PENSIONS.

On the 30th of June, 1879, there were 242,755 pensioners, divided as follows: Army invalids, 125,150; Army widows, children, and dependent relatives, 81,174; Navy invalids, 1,844; Navy widows, children, and dependent relatives, 1,772; surviving soldiers of 1812, 11,621; widows of deceased soldiers of that war, 21,194.

During the year 31,346 new names were added to the list; 908, formerly dropped, were restored; 13,497 were dropped.

The aggregate amount of one year's pension is \$25,493,742.15. The actual payments, however, during the year largely exceeds that sum, as nearly all the claims admitted embrace several years accrued pension. The aggregate amount paid to new pensioners during the year was \$5,763,758.60.

The number of unsettled pension claims on the 30th of June last was 136,645, exclusive of claims for arrears.

If new original claims continue to be filed as rapidly during the remainder of the year, as they have been for the past nine months, the Commissioner estimates the number of unsettled cases that will be pending at the close of the year at 250,000.

Since the passage of the "Arrears" act, the claims for pension have come in at an unprecedented rate, the invalids nearly double that ever known before in the history of the office.

This large inflow of claims and the consequent accumulation of work has given rise to complaints and much embarrassment, and these must continue until Congress authorizes the employment of a force sufficient to prevent the accumulation of claims.

A new and better system for recording the claims received has been

devised, and, when completed and in operation, will facilitate greatly the labors of the office.

It appears evident that the present force of the Pension Office is not adequate for the prompt disposition of the business before it, and I therefore concur in the Commissioner's recommendation for an additional appropriation of \$50,000, to be immediately available for the current year. The Commissioner suggests that the clerical force of the offices of the Adjutant-General and Surgeon-General is not sufficient to enable them to respond with promptness to the large number of calls made upon them.

The Commissioner again calls attention to the present defective system of setting claims, and renewls his recommendation that the plan hitherto presented by him be adopted. In this connection he says:

"Besides being cumbersome and expensive, the present system is an open door to the

Treasury for the perpetration of fraud. The affidavits in support of the claims have the same appearance to the officers of the bureau whether false or true. The rules which are established in relation to the production of evidence in attempting to exclude the frauds often work a hardship upon the honest claimant. He finds himself, through the death or imperfect recollection of witnesses or for some other cause, unable to comply with them, is often defeated, while the fraudulent claimant, who will manufacture the necessary testimony to meet them, succeeds in his claim. * * *

On the other hand, the change proposed will possess the following advantages over the present system:

1. The testimony and proceedings to establish the pension claims will be public and of a reliable character. This will facilitate prompt, more just, and more liberal decisions, and protect the Treasury from frauds, while the claimant's expenses will not be increased, but rather diminished.

2. The medical examinations being made by unprejudiced government officials, whose sworn duty it will be to find out and report the exact truth, both the claimants and the government will be relieved from the now too common danger of being made the victims of the ignorance, prejudice, or carelessness of a neighborhood examining surgeon.

3. The special investigation of cases by the special agents will be dispensed with as no longer necessary for the detection of fraud. The publicity of the proceedings in the neighborhood where the claimants reside will operate to restrain the presentation of unmeritorious and fraudulent claims, and furnish ample protection to the government against the successful prosecution of any such which may be presented.

But the great point, and the one to which every other consideration should yield, is that the new system, through its public proceedings among the claimant's neighbors, will obtain the truth in the cases in such reliable form that prompt justice will be done to the deserving."

The magnitude of the interests involved commends this system to the considerate attention of Congress. It is evident that the present system, based upon *ex parte* testimony, exposes the government to fraud, and makes its detection very difficult. I therefore concur in the opinion expressed by the Commissioner that a change is essential for the better protection of the government in the payment of pensions.

The Commissioner reports the satisfactory condition of the pension agencies and calls attention to what he deems the inadequate compensation of the agents. In the passage of the act fixing their pay, many

expenses incurred by them were not estimated upon, and to afford them relief he recommends that the law be so amended as to allow them eighteen instead of fifteen dollars for each one hundred vouchers prepared and paid.

Appended to the report are interesting tables under the following heads: Number of pension claims received, disposed of, and remaining on hand; number of pensions allowed and increased during the year, with their annual value, together with the yearly value of all pensions on the roll, and the amount paid for pensions during the year; number of pensioners dropped from the rolls during the year, and the cause; appropriations for the payment of pensions for the year, and the amount of disbursements; pension agents' name, location, geographical limits, and amount of funds on hand June 30, 1879; operation of Special Service Division for the year; comparative statement by agencies of the number of pensioners on the rolls at the beginning and close of the year; arrears payments made at each agency, and number of invalids, widows, children, dependent fathers and mothers, respectively; monthly receipt and disposal of claims for twenty-eight months succeeding June 30, 1877; pension claims filed and allowed since 1862; number of pensioners on the roll at the termination of each fiscal year since 1861. These statements give a correct exhibit of the work of the Pension Office, past and present, and afford valuable information to those who are interested in the subject.

PATENTS.

The report of the Commissioner of Patents shows a slight decrease of the work of the office for the year ended June 30, 1879.

The number of applications for patents was 19,300, being 357 less than the previous year. The number for design patents was 697; for reissue, 639; for registration of trade-marks, 1,465; for registration of labels, 631; caveats filed, 2,674.

The number of patents granted, including reissues and designs, was 12,471, being 1,629 less than the previous year. The number of trademarks was 1,144; labels registered, 403; patents withheld for non-payment of final fee, 828.

The total receipts of the office were \$703,146.79, being \$31,741.19 less than those of the previous year.

The expenditures for the year were \$548,651.47. This includes \$5,000 appropriated for the repair of models damaged by the fire, and is not properly chargeable to the current expenses of the office.

The expenditures for the previous year were \$665,906.02; \$50,000 of this being for the repair of models. Excluding the amount appropriated for the repair of damaged models in both years, the current expenditures of the office were \$72,254.55 less than those of the previous year. In referring to this reduction the Commissioner says:

This decrease in the expenditures has been enforced by the reduction of the appropriations, which has been carried so far as seriously to cripple the office and injure the public interests.

The excess of receipts over expenditures was \$154,495.32.

The Commissioner makes several recommendations worthy of special attention. He deems the excess of receipts over expenditures as an unjust tax upon inventors, and favors its reduction either by exacting lower fees or by expending the surplus in improving the facilities for transacting the business of the office. He recommends the latter course. He calls attention to the inadequacy of the rooms provided for the use of the office, and recommends that temporary accommodations be provided in that portion of the building now being reconstructed.

In his opinion, the interest of the service demands an additional force of clerks and examiners, and to this end he recommends that provision be made by law for ten additional clerks of class one, three of class two, two of class three, one of class four, and fifteen assistant examiners. He suggests also that a portion of the surplus revenues of the office be used annually for the purpose of making additions to the technical library of the office, and for increasing the compensation of the clerks and employés, who, while forced to remain in the lower grade because of inadequate appropriations, are showing efficiency entitling them to higher pay.

The Commissioner refers to the present system of preserving models and regards their accumulation as a serious evil, which in time must call for correction. In his opinion, the system is radically defective, and ought without further delay to give place to one more permanent.

The experience of the English demonstrates that drawings which conform to a high standard and show the vital features of an invention are sufficient for such examination as their system requires. There are many inventions which could be better shown by a model than by the most accurate scale-drawing. The right to call for a model should be reserved to the office, but none should be filed unless upon the written certificate of the examiner, or upon the special order of the Commissioner.

To secure this better system, statutory provisions are needed and recommended. To better guard models removed from the office for the purpose of duplication or repair, the Commissioner recommends the enactment of a law authorizing the employment of skilled workmen to make copies of models for official certification, who shall be required to take the oath of office and file bonds, and whose compensation shall be such as may be approved by the Commissioner of Patents, to be paid by those for whom the work was performed.

The Commissioner calls attention to the necessity of some provision being made by which the testimony of foreigners required in proceedings in the Patent Office, and taken in foreign countries, may be subject to the pains and penalties of perjury. This cannot be secured, or even asked, from foreign governments unless proffered by our own. Recommendation is therefore made that a law be passed authorizing the execution

by United States commissioners, or other United States officers, of commissions issued by foreign governments to take testimony in the United States to be used before foreign patent offices and before all judicial, legislative, and executive departments of foreign governments, and to punish perjury committed in such testimony; the law to be operative only in favor of such governments as shall make like provision for taking testimony in foreign countries, to be used in like manner in the United States.

As to the work of reproducing drawings by photolithography, the Commissioner expresses the opinion that the highest standard possible in the art could be secured at the lowest cost by the establishment of a division in some one of the executive departments, where photolithographic work could be executed for any branch of the service that might require it.

Recommendation is made for an appropriation of \$50,000 for printing the specifications of patents issued prior to November, 1866; also for an appropriation of \$10,000 for the publication of the general index of patentees, from 1790 to 1873. The work is nearly completed and will soon be ready for the printer.

For the reproduction of illustrations for the Patent Office Report for the year 1870, \$6,000 is asked for.

For the reproduction of drawings destroyed by fire it is estimated that an appropriation of \$60,000 will be necessary, and the urgency of the work suggests that the amount be made immediately available.

The Commissioner also recommends that the law relating to the payment of the final fee within six months of the allowance of a patent be so amended as to make the execution of the law possible in all cases. Under the present law, requiring a patent to be dated within six months of its allowance, the payment of the fee on the last day of the prescribed time makes it impossible to conform to the law without resorting to the fiction of a new allowance, made upon payment of the final fee too late to admit of the preparation of the patent before the expiration of the six months. The extension of the time, within which a patent may be dated, to seven months from the date of its allowance would obviate the present difficulty.

EDUCATION.

The Commissioner of Education states that the demand upon his office for information relating to educational matters has been greater during the past year than ever before. He reports that the collection of educational appliances and illustrations in the possession of the office has received numerous visits and proved extremely useful, and recommends that provision be made for its better exhibition, cataloguing, and increase; also, that a librarian be allowed by law, the library of his office containing at the present time 11,000 volumes and 22,000 pamphlets.

The office has sent to correspondents 46,000 pieces of matter, of which there were—

Of letters, circulars, and inquiries .....	.....	16,000
Documents (packages) .....	.....	30,000

and has received from its correspondents 30,000 pieces of mail matter, of which

Letters, circulars, receipts, and replies numbered .....	.....	27,000
Documents (packages) .....	.....	3,000

The printing of the circulars of information has been more than doubled during the year, and yet this work is much behind.

The Commissioner notes a marked advance in the adoption of the most approved methods of teaching.

Not least among the progressive movements of institutions for superior instruction is the extension of their advantages to women, adding to the provisions secured by colleges endowed especially for them, facilities in connection with some of the oldest and wealthiest foundations for young men.

The colleges of agriculture and the mechanic arts are making commendable advance in their appointed province. Great industrial interests are beginning to acknowledge the benefits received from their researches and from the trained experts they are sending out. In this work they are ably supplemented by the technical and industrial schools sustained by private endowments.

The increasing practice by professors in our scientific schools of supplementing ordinary class work with extensive field teaching, he notes as an interesting example of the tendency toward original investigation developing among our educators.

In professional training some efforts are being made to increase preliminary qualifications, to extend the professional course to at least three years in all ordinary cases, and to so grade the studies as to permit term examinations instead of postponing all these severe tests to the end of the entire course.

He notes also the progress made in training in special industries, as wood-carving, industrial drawing, cookery, nursing, &c.

The Commissioner expresses the opinion that population in the Territories has outstripped the number of school-houses and teachers, and that the present Territorial provisions for education are inadequate. He renews his recommendation that greater importance be given to educational office in the Territories.

In the continued embarrassed condition of education in the Territories and in the South he finds reason for earnestly renewing his recommendation of the passage by Congress of some measure of financial aid, which he suggests might, at first, be distributed on the basis of illiteracy.

CENSUS.

In the last annual report of the department it was recommended that new legislation be had in provision for the approaching tenth census of the United States. The considerations which, in the interest alike of economy and of sound statistics, seemed to require that the census should not continue to be taken under the act of May 23, 1850, were set forth at length in the papers accompanying the report. By act of March 3, 1879, Congress instituted a new system of enumeration, and made provision for the tenth and subsequent censuses upon principles widely different from those of the act of 1850. The careful and detailed consideration which has been given to this enactment in the preparations making for carrying its provisions into effect, and the experience which has been had of the workings of the system so far as it has already become operative, have confirmed me in the belief that the new legislation was wise and salutary, and that the results of the census soon to be taken under its provisions and sanctions will fully justify its wide departure from the methods previously in use.

No defect has appeared which in an appreciable degree threatens the integrity of the enumeration, nor has any change in any essential feature of the scheme suggested itself to the department as likely to result in an improvement in the quality of the statistics to be obtained.

The Superintendent of Census in his report recommends that the benefit of the franking privilege be extended to mail matter addressed to the Census Office in response to its inquiries, or in compliance with its requests, by persons not officers of the government; and that one interrogatory, which by the act of March 3, 1879, was introduced for the first time into the so-called population schedule, viz, as to the holders of the public debt, be dispensed with, as unlikely to secure results of value and as certain to hinder the progress of the enumeration if not to engender animosity.

These recommendations meet the approval of the department.

The report of the Superintendent raises the question whether a copy of the returns of enumerators should be provided for by new legislation.

It appears that a copy of the returns would probably cost \$130,000 as a minimum. In his opinion such an expenditure, if it were to be incurred, would properly be looked upon wholly as a measure of insurance against the accidental destruction of the original schedules. The use to which the copy would be put, except in case of such destruction of the originals, would be far too slight to justify the great cost of making the copy.

In fact this use may be regarded, in the consideration of this subject, as absolutely *nil*. The danger to be apprehended to the schedules is not that of their loss prior to or during transmission to the Census

Office, for such losses cannot reasonably be supposed to occur with respect to any but small, fractional portions, which could be replaced by a new enumeration at a cost of a few hundreds, or, possibly, thousands of dollars.

The only appreciable danger to be apprehended affects the accumulated stock of the returns after their receipt at the Census Office.

It is doubtless true, as shown by the Superintendent, that the danger of such destruction during the few months necessary to complete the compilation of the most important statistical results, those which relate to the population of States, counties, cities, and towns, and which classify the population according to color, age, sex, race, and nationality, would be very slight, and that exceptional provisions against such danger could be made at a cost small in comparison with the first cost of a copy of the returns; but it is my opinion that in dealing with a matter so fundamental in our political system as the decennial enumeration of the people for the purpose of apportioning representation among the States, considerations of economy in expenditure should be subordinate, and I recommend that a copy of all the returns made by enumerators, under the act of March 3, 1879, be authorized, and appropriation made therefor.

The report of the Superintendent contains an account of the organization and operations of the Census Office subsequently to the passage of the act of March 3, 1879, sufficiently in detail to exhibit the novel features which have been introduced into that service by the express provisions of the act, or in the exercise of the large discretion vested in the Superintendent relative to the agencies to be employed in collecting statistics not directly political in their character.

The operations of that office naturally divide themselves into two groups, those which are preparatory and preliminary to the count of the people, to take place next summer, and those which are directed to the collection of statistics relating to the current twelve months.

Under the act of 1879, as under that of 1850, there is, as the Superintendent remarks, a census day and a census year. The census day is June 1, 1880. The census year comprises the period June 1, 1879 to May 31, 1880; and for the whole of this period the law requires certain very important classes of statistics to be collected relating to agriculture, manufactures, mining, and the fisheries, to taxation and public education, to pauperism and crime, to mortality and the causes of death, &c. The act of 1879 differs from that of 1850, by authorizing the employment of experts and special agents at the discretion of the Superintendent of Census, for the collection of these classes of statistics.

Under this provision, several special investigations of a very wide reach have been already set on foot, and others will probably be instituted as the occasion arises.

In making these arrangements careful consideration has been had of the maximum limit of expenditure fixed by the act of March 3, 1879.

It is not my expectation to be obliged to present to Congress any request for a deficiency appropriation under the law as it stands, and I am satisfied that the Superintendent, in all his plans, is legally observing the conditions thus imposed by the law creating his office and providing for the approaching census.

In the preparations for the enumeration which is to be commenced on the first of June, progress has been made to the point of apportioning among the States and Territories the aggregate of 150 supervisorships, authorized by the act of March 3, and dividing the States to which supervisorships in excess of the minimum were assigned into districts of a corresponding number. The duty which the law imposes on the department, of fixing the rates of compensation to be paid to enumerators, is one of great nicety and difficulty.

The conditions, geographical and other, of each section of the country which bear on the facility of enumeration are being thoroughly and systematically studied, in order that the greatest economy and efficiency of service may be combined with the highest attainable equity toward the agents of the government performing this arduous and responsible work.

ENTOMOLOGICAL COMMISSION.

The United States Entomological Commission has continued its investigations into the habits of the Rocky Mountain locust or grasshopper, in the permanent Northwest breeding-grounds of the species. The principal aim of the commission has been to get more accurate knowledge of the limits and extent of those breeding-grounds, with a view of preventing the migrations of the winged insects therefrom.

Congress at its last session enlarged the field of the commission's labors by requiring an investigation into the habits of the cotton worm, and of other insects injurious to the cotton-plant and to agriculture. The work in the West and Northwest is being continued by Dr. Packard and Professor Thomas, while Professor Riley has taken charge of the work in the Southern States, and has been industriously pursuing it. Some of the discoveries and practical results have already been embodied in a special bulletin. The losses which insects inflict on the crops of the country amount to many million dollars annually, and the well-directed efforts of intelligent entomologists in endeavoring to prevent these losses have already resulted in much good.

The Southern States have suffered severely from the cotton-worm alone, and are directly interested in this branch of the work of the commission.

A sufficient sum is asked for, to complete in a satisfactory manner the investigations now being prosecuted, and to publish a report thereon for distribution among those interested in the success of the work.

THE HOT SPRINGS.

The Hot Springs of Arkansas are situated in a narrow ravine between two rocky ridges in one of the lateral ranges of the Ozark Mountains.

The reservation contains about 2,565 acres. The mountain on which the springs are found, and which has been reserved from sale, under the act of March 3, 1877, contains about 265 acres.

Previous to October, 1875, the title to the most valuable portion of the land had been in dispute for more than fifty years. The controversies which existed were finally brought before the United States Court of Claims under the act of May 31, 1870, the provisions of the act giving the right to any person claiming title, either legal or equitable, to the whole or any part of the four sections of land known as the Hot Springs Reservation, in the State of Arkansas, to prosecute to final decision any suit that may be necessary to settle the same.

The various parties setting up a claim filed their petitions in the Court of Claims, the cases were consolidated, and after a full investigation, the court rendered a decree in favor of the United States, and adverse to all the claimants. An appeal was taken to the Supreme Court of the United States, and after able arguments by distinguished counsel on both sides, Justice Bradley, in October, 1875, delivered the unanimous opinion of the court, affirming the decree of the Court of Claims.

The act which authorized these suits also provided that if, upon the final hearing of any cause provided for in the act, the court should decide in favor of the United States, it should order the lands into the possession of a receiver, to be appointed by the court, who should take charge of and rent out the same for the United States, until Congress should by law direct how they should be disposed of.

The receiver was duly appointed, and according to the report of the Secretary of the Treasury, the rentals collected by said receiver and covered into the Treasury amounted to \$33,744.78.

Under the act of March 3, 1877, the office of receiver was abolished and the President was authorized to appoint three discreet, competent, and disinterested persons, who should constitute a board of commissioners, whose duty it was to lay out the lands of the reservation into convenient squares, blocks, lots, avenues, streets, and alleys; designate the tract, including the Hot Springs Mountains, which was to be reserved from sale; to show by metes and bounds, on a properly prepared map, the parcels or tracts of land claimed by reason of improvement made thereon, or occupied by each and every such claimant and occupant on said reservation; to hear any and all proof offered by such claimants and occupants and the United States, in respect to said lands and the improvements thereon, and to finally determine the right of each claimant or occupant to purchase the same, or any portion thereof, at the appraised value fixed by said commissioners. They were also vested with the power to condemn and remove all buildings or obstructions upon

the reservation, when the same were necessary to carry out the provisions of the act; fix the value of property condemned, and to issue a certificate or certificates therefor to persons owning the same. It was made the duty of the Secretary of the Interior within thirty days after said commissioners filed their report and map in his office, to instruct the land officers of Little Rock land district to allow the lands to be entered, and to cause a patent to be issued therefor; the claimant or occupant, his heirs, or legal representatives, in whose favor said commissioners had adjudicated, having the sole right to enter and pay for, within twelve months of public notice of right to enter, at the price fixed by said commissioners, the amount of land that they were entitled to purchase, as shown in the certificate issued in their favor. Upon failure to pay the valuation appraised, within the time prescribed, the said lands, together with all other lands, that no one has an adjudicated right to purchase under the act, are to be sold at public sale to the highest bidder for not less than their appraised valuation.

The moneys obtained from the sale of these lands are to be paid into the Treasury in the same manner as other moneys arising from the sale of public lands, and held for the purpose specified and for the further disposal of Congress.

Under the provisions of the act cited, the President, on the 30th March, 1877, appointed the following commissioners: A. H. Cragin of New Hampshire, John Coburn of Indiana, and M. L. Stearns of Florida. Their term of office was for one year, and in 1878 provision was made by Congress for an extension of their time, but owing to an unfortunate omission in the engrossing of the bill, the proviso relating to the Hot Springs failed to become a law; Congress, however, on the 16th of December, 1878, authorized the continuance of the commission for one year, and the same gentlemen were re-appointed by the President.

A preliminary report recently received from the commissioners justifies the belief that their work is about completed and that the requirements of the statute relating to their duties will be fully complied with before the expiration of their term of office. Their labors have been arduous, and, from their nature, somewhat embarrassing; yet they appear to have been performed with a conscientious desire to do justice to all claimants without doing injustice to the interests of the government. If the final results of their labor shall prove as satisfactory as the zeal and good judgment already shown, they will be entitled to great credit for the just settlement of vexed questions and for the laying out of a plan which, if carried out by the citizens of Hot Springs, will make that place a most attractive resort for those who seek its pure air and curative waters.

The efficacy of the waters of Hot Springs has been conclusively proven by the many remarkable cures which have followed their judicious use. When their virtues become more widely known, these springs

will doubtless be visited by thousands who are now strangers to their curative powers. To secure to invalids the fullest possible benefit of these waters, without incurring those impositions which too often mark the possessory rights of monopolies, was doubtless one of the principal objects which prompted Congress to reserve from sale this reservation by the act of 1832, and to direct the permanent reservation of the mountain upon which the springs are located in the act of March 3, 1877.

The reservation of these springs by the United States imposes upon the government certain responsibilities which it cannot, or ought not avoid. A town, doubtless at no distant day to be a city, is growing up around the borders of this reserved tract, and entirely dependent upon it for its prosperity. Whatever can be done properly by the government to secure and retain the full benefit of the waters under its control for the use of the people and the preservation of other health auxiliaries which are now in its possession should not be overlooked. In my opinion, all the mountains within the four townships should be withdrawn from sale. Their only value is in the fine growth of timber which covers them, and this timber is needed to protect the valley of Hot Springs and adjoining lands from the fierce rays of the sun. It would be impossible to foretell the result which would follow the denuding of these mountains; certainly it would be most disastrous. It is the opinion of scientific men resident in the valley, and others who have considered the subject, that the wooded heights surrounding Hot Springs are of vital importance to the comfort and health of its inhabitants, and that the government could confer no greater boon on the town than to secure by reservation the forests which crown the mountains in their vicinity. In this opinion I fully concur, and recommend that authority be given for the withdrawal from sale of these mountain tracts.

Provision should also be made for the reservation of a tract from the unadjudicated lands sufficient for the erection of a hospital for the use of the Army and Navy. The importance of this will sooner or later be recognized, and the United States should retain, while it has the opportunity, the land necessary for the purpose.

Authority should also be given to reserve for the use of the town, as a public park, the land now occupied as a cemetery. To place this on the market for sale for business or speculative purposes would be repugnant to the people whose friends and kindred are buried within the inclosure. While the necessity exists for the removal of the cemetery from its present site, the location should be given to the town whose dead it contains, with such restrictions as would secure its use for a public park. A site should also be retained for the erection of a charity hospital, whenever private or State benevolence provides the funds necessary for the purpose. Hundreds of the afflicted poor yearly seek these waters as a last resort. Many become paupers on the town or depend upon private charity for their daily bread. What is now felt as

a hardship will in time become an unbearable evil, unless some organized effort is made to properly care for those whose poverty and sufferings commend them to public sympathy. To provide for this growing necessity a suitable tract should be reserved from sale.

The west line of the permanent reservation forms the east line of Valley street, the principal business thoroughfare in the town. A substantial stone wall, to retain the filling in of earth necessary to elevate the line of the reservation to the grade adopted by the commissioners, should be built at as early a day as possible. As this wall would be located on the permanent reservation, the expense of its construction should be borne by the United States. A plan has been submitted by the superintendent showing extent and cost of the improvements. It will call for about 72,000 cubic feet of masonry, and would cost about \$15,000. Recognizing the importance of this work, and the propriety of its cost being borne by the United States, I recommend that the money collected for rents of Hot Springs and covered into the Treasury by the late receiver, or so much thereof as may be necessary, be appropriated by Congress for the building of this wall, and for grading the ground within the permanent reservation so as to conform to the proposed grade of Valley street.

The law governing the sale of the Hot Springs property should be so modified as to permit entry upon and purchase, within three months of date of notice, of the lands that no one has an adjudicated right to purchase. As the law now stands these tracts of land cannot be sold until after the expiration of fifteen months, so that the growth of the town, so far as the occupation of new land goes, must be practically suspended during that time.

While there are good reasons for allowing a year's time for payment to those who have an adjudicated right to purchase, I can conceive of none for withholding all the lands from sale during this year of grace, and three months beyond, to cover period of public notice.

The necessity for this modification is so apparent that I recommend it to the early and favorable consideration of Congress.

The reduction of the water rents at the last session of Congress has made it impossible to carry out the projected improvements upon the reservation, the amount received being barely sufficient to pay the salary of and expenses incurred by the superintendent. If the reduction was intended to benefit those who use the waters, it has failed in its purpose, for the charge for bathing remains the same, and the only ones favored are the bath-house keepers. Considering the necessity for a reliable and sufficient revenue to maintain and improve the reservation, I recommend that the old rates be restablished, so as to secure the funds necessary for the improvement of the reservation and the proper care and supervision of the grounds.

YELLOWSTONE PARK.

The superintendent of the Yellowstone Park reports the continuation of improvements by the opening of new roads and trails, building of bridges, and the construction of necessary buildings within the park for the accommodation of the force employed and protection of the property of the United States.

It has been suggested that measures should be taken to preserve upon this reservation specimens of the notable wild animals common to the country, but fast disappearing from the forests, mountains, and plains of the West. The American bison and buffalo, the elk, moose, and deer, and mountain sheep would thrive in the Yellowstone Park, and I am informed that certain portions of it could, with but little trouble, be so protected as to secure their immunity from destruction. The suggestion is a good one, and early direction should be given to carry it into practical effect.

CAPITOL BUILDING AND GROUNDS.

The architect of the Capitol reports the completion, during the year, of many needed improvements in the Capitol building. He again calls attention to the present condition of the old Hall of Representatives, which, from its wooden partitions and roof, is liable to destruction by fire. Fire-proof measures should be taken to make this portion of the Capitol as nearly fire-proof as possible. The architect calls attention to the means employed for the ventilation of the building, and, for the purpose of securing a supply of pure air, suggests that the strip of government land running from the Botanical Garden to the government reservation at the junction of New Jersey and Virginia avenues be thickly planted with trees so as to deflect any currents of air, tainted with malaria, which may come from the low lands along the Potomac. He reports the Capitol as in good repair and suggests the importance of providing additional room for the growing demands of Congress. In his opinion the projection of the center portion of the building at the eastern front would be in accord with architectural beauty of proportion and furnish the room required.

As provided by the act of March 3, 1879, a fire-proof extension has been erected to the Government Printing Office.

Attention is called to the lighting of the Capitol by means of electricity. The voltaic battery formerly used in lighting the gas-jets has been superseded by the more economical dynamo-electric machines. Experiments are being conducted with a view to secure a steady electric light for the rotunda and the two wings of Congress. Advances have been made in this direction, promising complete success, but no change in the method of lighting will be made until a steady electric light is secured.

Sodden earth will be used to cover the Capitol grounds in accordance

with the plans originally adopted. The walks and pavements already laid thus far have proven durable, with a few exceptions; trees and shrubbery have been planted, and the general design of improvements is approaching completion. Since the introduction of the police, good order has been maintained upon the grounds and but little damage has been sustained by depredations.

The architect reports certain repairs upon the court-house of the city of Washington, and calls attention to the insecure condition of the land records of the District of Columbia stored therein. A large part of the upper story of this building is of wooden construction, and liable to fire. Greater security could be obtained at a small cost by removing the land records from the upper to the lower or basement floor, which is substantially fire-proof.

The expenditures on the Capitol Extension account for the year ended June 30, 1879, were \$55,000, the amount of the appropriation.

The appropriation for extension of Government Printing Office was \$43,800; amount expended to July 1, \$14,244.57; leaving an unexpended balance at that time of \$29,555.43.

The expenditures on account of lighting the Capitol and grounds were \$27,000, the amount of the appropriation.

The expenditures on account of the improvement of the Capitol grounds were \$100,000.

HOSPITAL FOR THE INSANE.

The report of the Board of Visitors of the Hospital for the Insane contains interesting information pertaining to the condition and management of the institution.

The whole number of patients under treatment during the year was 1,015. Admitted during the year, 222. Males treated, 769; females, 246. The number discharged was, of recoveries, 92; improved, 37; unimproved, 4; died, 63; remaining in hospital June 30, 1879, 819, an excess of 26 over the same time last year.

The patients treated were, from the Army, 491; Navy, 51; civil life, 473. A statement is given of the sanitary history of those who died during the years 1878 and 1879; also in relation to the duration of their mental diseases. A table is given showing the nativity, as far as could be ascertained, of the 4,715 cases treated since the opening of the institution, together with the form of disease of those admitted. A tabular statement is also submitted showing the time of life at which the 4,715 cases became insane.

Carefully prepared tables are also submitted showing the history of the annual admissions since the opening of the hospital, with the discharges and deaths, and the number of patients of each year remaining June 30, 1879; also showing the mean annual mortality, proportion of recoveries, per cent. of the discharges, including deaths, for each year since the opening of the hospital. Attention is called to the crowded

condition of the hospital and to the temporary arrangements made for the accommodation of some of the patients.

During the year buildings have been erected for hospital use; also for a bakery and laundry. They have been substantially built, and will prove of great service to the institution. Ample precautions have been taken to guard against fire by the erection of new hydrants, cisterns, and force-pumps, and by providing the necessary hose, ladders, buckets, and extinguishers.

The farm and garden belonging to the institution are reported as a source of health and profit. The products of both for the year are valued at \$17,559.20, exclusive of products consumed on the farm, and valued at \$5,421.

The receipts for the institution for the year were \$176,809.41; \$150,000 being from the Treasurer of the United States.

The estimates for the next fiscal year are, for support, clothing, and treatment of the insane, \$175,000. For general repairs and improvements, \$10,000. For special improvements, reservoirs and filters, additional accommodation for cattle, storage for hay, &c., a kitchen and scullery detached from main hospital, a "mortuary building," and greenhouse, \$25,000. For furnishing and fitting the relief building for occupation, \$15,000. Good reasons are given for the appropriations asked for, and I recommend them to the favorable consideration of Congress.

The board of visitors refer to the necessity of having separate quarters provided for the female patients, and submit at length their own views, and those of the Association of Medical Superintendents of Institutions for the Insane, showing that separate accommodation for the sexes renders their care and treatment more easy and successful. I renew in this the recommendation formerly made in favor of the erection of the additional building for the accommodation of female patients. Aside from the advantages which must come from the separation of the sexes, the additional building is needed to provide for the growth of the institution. It is thought that at least three years will be required to complete the proposed edifice, and such appropriation as may be needed to begin the work should be made without delay.

The sanitary condition of the hospital, considering its overcrowded wards, has been excellent, and its general management has been creditable to those having charge of its affairs.

INSTITUTION FOR THE DEAF AND DUMB.

The twenty-second annual report of the Columbia Institution for the Deaf and Dumb shows a favorable condition of its affairs. The total number of pupils in the institution at the date of the report, October 28, 1879, was 118, an increase of 48 since July 1, 1878.

The sanitary condition of the institution has been excellent, no death

aving occurred during the year, and no serious cases of sickness re-
orted.

The course of instruction is essentially the same as that of previous
years, and the educational progress of the pupils is reported as more
gratifying than ever before. Instruction in articulation under Bell's
system of visible speech has been satisfactory in all cases.

The receipts of the institution for the year ended June 30, 1879, were
\$5,202.56, of which \$51,000 was from direct appropriation by Congress.
The expenditures during the same period were \$54,773.69, of which
\$29,348.71 was for salaries and wages.

The amount expended for improvements on buildings and grounds was
\$5,040.36.

The estimates for the next fiscal year are, for the support of the institu-
tion, \$53,500; for erection and fitting up of a gymnasium, and for im-
provements of the inclosure of the grounds, \$14,388.60.

FREEDMEN'S HOSPITAL.

The report of the Freedmen's Hospital shows the whole number of
patients in the hospital during the year ended June 30, 1879, 904.

Admitted during the year, whites, 190; colored, 452; transients, 31;
total, 673. Of this number 136 were white males, 34 white females;
colored males, 247; females, 205. During the year 422 were discharged
ured; 90 were relieved, and 140 died.

The Colored Orphans' Home and Asylum, containing 115, was fur-
ished with medicines during the year.

Twenty-two hundred and seventy-four patients have been treated
outside of the hospital, and about four thousand prescriptions have been
put up for their use.

The report contains tables showing the place of nativity of the patients
admitted, and the diseases for which they were treated both in the hos-
pital and dispensary. The average cost of each patient, for subsistence,
medicines, nursing, and clothing, is given at forty-five cents per day.
The surgeon-in-chief concludes his report with the statement: "This is
the only general hospital for the reception of all classes of patients
within the District. Many of the patients are non-residents, and must
be provided for somewhere by the general government when they fall
sick in this city. The location of the hospital is central and healthy.
Not a case of original malarial disease has been known to occur within
the premises since they have been occupied for their present purpose,
and only one case of typhoid fever."

COLUMBIA HOSPITAL FOR WOMEN.

The annual report of this institution shows a gratifying condition of
its affairs during the past year. Out of 299 cases treated in the hospital,
only one death has occurred during the year.

The sanitary condition of the hospital is reported as satisfactory, and the general management of the surgeon in charge is commended by the board of directors and by the advisory board.

The number of patients admitted during the year was 280. In hospital July 1, 1878, 19; total treated, 299; discharged, 272; remaining in hospital July 1, 1879, 27. The number treated in the dispensary connected with hospital, in addition to those admitted, was 418. Attention is called to the insufficiency of the present appropriation, and an additional amount is asked for the next fiscal year.

COURT OF CLAIMS.

By act of July 1, 1879, the Secretary of the Interior was authorized and directed to procure suitable and necessary rooms for the use and accommodation of the Court of Claims. In compliance with this requirement the first floor of the Freedmen's Bank building was selected as offering the most available rooms that could be obtained in a fire-proof structure. A lease from October 1, 1879, to the end of the current fiscal year was entered into, and the rooms having been suitably fitted up and furnished, so far as the limited appropriation would permit, are now occupied by the court.

TERRITORIES.

UTAH.

The governor of Utah reports unusual drought during the past season, and serious effects therefrom on the crops of the Territory; the production in grain, vegetables, fruit, and hay being not more than one-half the usual amount.

The snows which fall in the mountains and remain there during the summer provide the main supply of water necessary for irrigation. During last winter but little snow fell, hence the short supply and the deficiency in the crops. Some of the largest streams in the Territory have gone dry; something never before known to the oldest settlers. Even the Great Salt Lake has fallen four or five feet. Stock has suffered severely on the mountain ranges. Despite the season's failure it is believed that the production will be sufficient to supply the wants of the people during the year.

On the subject of grazing lands the governor favors the adoption of some system by which title can be secured to larger tracts than are now allowed by law. Attention is called to the defects in the present mining laws, and suggestions are made as to the amendments necessary. The governor holds that "a man's patent to his mine should be a perfect title to the property covered by his patent, and parties purchasing patented mines should be required to trace titles no further than to the patentees." He also favors the granting of a larger surface area, and the confinement of rights within the lines granted. In other words, a

nining claim should be as definite, so far as its boundaries go, as that of a city lot, and the right to work should be confined within the perpendicular lines of its side and end. Following the dip of mineral veins on the ground of other parties is, in his opinion, the fruitful source of litigation.

Peaceful relations have been maintained with the Indians during the past year. A majority have abandoned their tribal relations, and have taken up small farms in various localities, which are being worked to advantage.

The mining interests of Utah are reported as in a most excellent condition; the introduction of new methods of reducing ore causing larger profits to be realized than were possible in former years.

From the year 1870 to 1878, inclusive, the Utah board of trade reports, is taken from the books of the Utah Central Railroad, the shipment from Salt Lake City of 76,912 tons of lead ore, 109,276 tons of argentiferous lead bullion, and 8,197 tons of lead, worth in the aggregate about \$40,000,000. The value of the ores taken out during the past three years was \$18,558,805.48 ; of this, \$5,379,446 was lead, the remainder being the precious metals.

The finances are reported in good condition. There is no indebtedness unprovided for. Territorial scrip which four years ago sold for 40 cents on the dollar, to-day is worth 98. Taxation is equitable, and provides for the necessary expenses of the Territory.

During the past year one hundred and fifty miles of additional railroad have been built.

WASHINGTON TERRITORY.

The governor of Washington Territory reports satisfactory advancement in the development of the agricultural, manufacturing, mining, and commercial resources of the Territory. Its isolated position and the misconception existing in relation to its climate and productions have tended to prevent its rapid growth.

Situated between the forty-sixth and forty-ninth degrees of north latitude, its climate is generally believed to be cold, and yet the results of careful observation show that the climate of Western Washington is mild, during the winter months the temperature seldom falling below the freezing point. A tabular statement is given, showing the character of the climate throughout the year, based on accurate meteorological observations taken at Port Blakeley, on Puget Sound, in latitude $47^{\circ} 36'$. It would appear from this statement that the lowest temperature during a period of twenty-six months was 25° above zero. The highest in 1877 was 88° ; in 1878, 94° ; and in 1879, 86° .

The average rainfall is about the same as in the Eastern and Western States. The mildness of the climate is due to the presence of the thermal current, having its origin at the equator, near the one hundred

and thirtieth degree of east longitude, Greenwich, and which flows northwardly to the Aleutian Islands, where it separates one branch flowing eastwardly, along the peninsula of Alaska, and then southwardly, along the coast of British Columbia, Washington Territory and Oregon.

The prevailing winds during the winter are from the southwest, and those of the summer from the northwest.

The temperature of Eastern Washington as compared with the western division is slightly higher during the summer and lower during the winter.

The average annual temperature is reported as follows: Spring, 52°, summer, 73°, autumn, 53°, winter, 34°.

All the cereals, fruits, and vegetables grown within the temperate zone can be raised in Washington Territory. Eastern Washington is the great wheat field of the Territory, with a capacity for upwards of one hundred millions of bushels. The average yield is twenty-five bushels to the acre.

The exportation of wheat during the present year will be upwards of 60,000 tons. Transportation facilities are inadequate to the demand and will so continue until the obstructions are removed at the Dalles, Cascades, and other points on the Columbia River. To secure the removal of these obstructions, liberal appropriations should be made by Congress.

The exports of the Territory have been the cereals and wool, flour, live stock, canned salmon, fish, lumber, coal, potatoes, hops, hides, barrels, lime, &c.

The export of coal during the year was 190,000 tons; lumber, 150,000,000 feet; salmon, 160,000 cases of forty-eight cans each, or a total of 7,680,000 cans.

The population of the Territory on the first of May last, was 57,784, an increase of 7,273 over last year.

The recent transfer of the non-treaty Indians in Eastern Washington to a reservation on the west side of the Okinakane River, has removed all danger of collision between the two races, and will no doubt prevent difficulty in the future.

NEW MEXICO.

The report from New Mexico gives interesting and valuable information relative to the resources of that Territory.

The three leading interests are mineral, grazing, and agricultural; manufacturing is confined almost exclusively to jewelry, of which very exquisite work in filigree is produced in Santa Fé, mostly from gold and silver native to the Territory.

But little advancement has been made in agriculture. Its present condition is very primitive, the old Mexican wooden plow still holding preference with the farmers. The little produced is with a view to satisfy

local consumption. Wheat and oat fields, as rich as any in Illinois and Minnesota, may be seen six or seven thousand feet above the level of the sea. The grape is easily raised, is free from disease, and affords a good quality of wine.

The area of agricultural production cannot be even approximately given. All irrigable lands, wherever found in the Territory, may be classed as productive or farming land.

The Rio Grande Valley, about four hundred miles in length by an average of five in width, has a soil light, warm, and surpassingly rich. Not more than one-tenth of this land is occupied. Fruits succeed admirably in this locality, although the varieties at present cultivated, except the grape, are of the poorest kind.

The valley of the Pecos River is almost entirely devoted to grazing purposes. Like the valley of the Rio Grande its soil is rich when properly irrigated, and its climate healthy and delightful.

The Mesilla Valley, like the two mentioned, is inviting both for agricultural and grazing purposes. The vast tracts of table lands bordering the valleys are too high for irrigation, but yield grasses of the richest kind for cattle and sheep raising. With such unlimited ranges, stock raising has become a profitable industry, with promise of substantial growth in the future.

In relation to the mineral resources, the governor is of the opinion that New Mexico will compare favorably with her neighbors in the yield of precious metals.

Although the era of prospecting has hardly given place to that of development, enough is already known to warrant the assertion that the Territory is well stored with gold, silver, iron, copper, lead, zinc, mica, gypsum, coal, marble, and precious stones.

The coal croppings in Socorro and Colfax Counties, and on the Galisteo River, indicate an inexhaustible supply both of bituminous and anthracite. Cannel coal is also found in the Territory. No attention is being paid to the production of iron, although it is to be found, more or less, in every mountain range.

The same may be said of copper, lead, and mica, while gypsum is so common that it is hardly a merchantable commodity.

Silver and gold are to be found in many localities, and many mines are being worked to advantage. The great drawback at the present time is the want of water.

Mention is made of the numerous hot springs in the Territory.

The waters of many of these have well-determined curative properties, and at Las Vegas elaborate preparations are being made for the care and entertainment of guests and invalids.

An approximate estimate gives the territory a population of 125,250. The Pueblo or town Indians are estimated at 9,000, and the wild Indians at 14,500.

The school system established in 1871 shows commendable progress,

embarrassments of the country, and lands to the Indians, and of the doing away with the Indians of the laws, so as to be suitable to their condition.

The governor desired to know the necessity which gave birth to the local legislation which, to meet its necessities, takes away parts of national law, and makes the sections amended, even as they are, to fit specifically the native history in breed and storm. Common men, who understand them, like lawyers and judges, when faced with such cases, are compelled to do the best they can.

The mining laws as proposed by the Union Congress should be such as to cover the mining districts, leaving but little scope for local legislation. Congress interposes itself in the prevention of individuals or corporations from being guarded by strict laws, so as to not be monopolized by the United States government, especially in view of the present weaknesses; the laws should be made more effective.

The inadequacy of the miners' theory, and the fact that it was intended to be so, is evident.

The failure of the miners' theory, the economic and the political, is evident.

No exception is made.

Majority, with the

minority, is evident.

The "miners' theory" is a very bad one, based upon the idea that the miners are the only ones who have the right to mine, and that they will not do so unless they are given the right to do so. It is a very bad theory, and it is not a good one.

This portion of the report will

fire-proof, will contain about one-third more case-room than was before available, and, both in architectural beauty and in durability of construction, will be a great improvement over the old halls.

Under the capable management of Adolph Cluss, who designed the plan for reconstruction, and who was appointed engineer by the commission having the restoration in charge, the work thus far has been well and economically done.

The attention of Congress is called to the necessity of authorizing the construction of a new and fire-proof roof for the south and east wings, similar to the one designed for the north and west wings. The roof which now covers this portion of the building is little better than a tinder-box, and is liable at any time to be destroyed by fire. The copper roofing is laid upon a covering of boards, and these are fastened to light wooden rafters. The space beneath is traversed by numerous smoke-flues, many of which run horizontally for considerable distances. These imperfect and badly constructed flues are liable at any time to get out of order and endanger the safety of the building. I regard the recovering of this portion of the building with a fire-proof roof as absolutely necessary, and earnestly recommend that an appropriation sufficient for the purpose be made at as early a day as possible.

It is deemed advisable to substitute for the rotten wooden joists and lathing of the ceilings of the first story of the north wing, iron lathing fastened to iron frames; replaster and repaint the rooms and hall damaged by the fire, and to repair the brickwork and plastering of the arched ceiling of the west wing. This work was not included in the original estimates for the reconstruction of the building, and therefore an additional appropriation of \$10,000 is asked for.

An appropriation of \$6,000 is also recommended for the construction of a hydraulic elevator in the north wing, with approved safety apparatus, including a steam-boiler of steel, water-supply, steam-pump pressure, and discharge tanks, all of sufficient size to work, if necessary, two elevators and the necessary machinery.

It is estimated that it will cost \$160,000 to properly fit up the two reconstructed wings with fire-proof model-cases, consisting of wrought-iron frames and doors, plate-glass fronts, and fluted-glass shelves. The necessary cases of hard wood finished in good style would cost about \$90,000, but, as these would supply an amount of combustible material which might at any time endanger the best system of fire-proof construction, their adoption is not deemed advisable. Although the difference in cost between iron and wood cases would appear considerable, I am satisfied that it would be wise economy to have all model-cases in the future constructed of iron, and I therefore recommend that the necessary appropriation be made for this purpose.

I am, sir, very respectfully, your obedient servant,

C. SCHURZ,
Secretary.

The PRESIDENT.

embarrassments is the early abolition of tribal relations, the giving lands to the Indians in severalty, with restrictions upon their alienation, the doing away with extensive reservations, and the extension over Indians of the laws of the United States, with rights and obligations suitable to their condition and future wants.

The governor discusses the theory of Territorial government, the necessity which gave rise to its organization, and the crude national and local legislation which from time to time has been had to provide its necessities. He says "there is no compacted and consistent body of national law concerning the Territories. Acts have been passed, sections amended, overlapped, and repealed, and special features introduced to fit special cases, until they lie along the pages of our legislative history in broken fragments like wrecks on the seashore after storm. Common people, whose interests are in daily jeopardy, can understand them; lawyers are paid for disagreeing on their meaning and judges, when failing from its obscurity to ascertain what the law are compelled to decide what it ought to be."

The mining laws especially need revision; and in the governor's opinion Congress should pass a comprehensive and carefully-revised code covering the mining field, clearly defining all rights and remedies, leaving but little scope for local legislation. It is also suggested that Congress interpose for the protection of agricultural interests by preventing the monopoly of the streams of the Territory by private individuals or corporations. The usufruct of natural streams should be guarded by stringent laws, so that the water needed by the many should not be monopolized by the few. The laws relating to the holding of United States courts need revision. The powers and duties of judges especially in vacation; the mode of enforcing attendance of jurors and witnesses; the manner of impaneling grand and petit juries should be made more effective, and be more clearly defined.

The inadequacy of present compensation to public officials in the Territory, and the insufficient appropriations for contingent expenses alluded to as sources of much embarrassment.

The finances of the Territory are reported to be in a satisfactory condition, and the debt of the Territory is gradually being reduced.

No reports have as yet been received from the governors of Arizona, Wyoming, and Montana.

RECONSTRUCTION OF THE BUILDING.

The restoration of the Interior Department building is progressing as rapidly as the nature of the work of reconstruction will permit. The roof on the north wing is completed, and that of the west wing will soon be finished. The engineer in charge expresses the opinion that both wings will be ready for occupancy before the close of the present fiscal year, and that the cost of the work will not exceed the amount appropriated.

This portion of the building, when completed, will be substantial

fire-proof, will contain about one-third more case-room than was before available, and, both in architectural beauty and in durability of construction, will be a great improvement over the old halls.

Under the capable management of Adolph Cluss, who designed the plan for reconstruction, and who was appointed engineer by the commission having the restoration in charge, the work thus far has been well and economically done.

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ANNUAL REPORT

OF THE

SECRETARY OF THE INTERIOR

ON THE

OPERATIONS OF THE DEPARTMENT

FOR

THE YEAR ENDED JUNE 30, 1880.



**WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1880.**

R E P O R T
OF THE
SECRETARY OF THE INTERIOR.

DEPARTMENT OF THE INTERIOR,
Washington, November 1, 1880.

SIR: In submitting to you my last annual report on the operations of this department, with such suggestions as, in my judgment, it would be profitable to the public interest to adopt, I beg leave to pass in rapid review the policies followed in some of the most important branches of the public service under my supervision during the period of the present administration.

INDIAN AFFAIRS.

When I took charge of this department the opinion seemed to be generally prevailing that it were best for the Indians to be gathered together upon a few large reservations where they could be kept out of contact with the white population, and where their peaceful and orderly conduct might be enforced by a few strong military posts. It was, perhaps, natural that, with limited knowledge of the character and needs of the Indians, and no experience in their management, I should at first accept that opinion, for the very reason that it was entertained by many who might have been regarded as competent authorities upon the subject. This view had already been acted upon to some extent before this administration came into office. It involved the removal of Indian tribes and bands from the lands they occupied, with their consent freely or reluctantly and doubtfully given, and in some cases the breaking up of beginnings of civilized occupations in their old homes. It was believed that this policy would be apt to keep the Indians out of hostile collision with their white neighbors, and in exclusive and congenial contact with their own kind, and thus prevent disturbances on the part of the Indians themselves and encroachments by the whites. Some measures of this nature had been carried out, and others were, indeed, not initiated, but executed during the early part of this administration. I refer especially to the removal to the Indian Territory of the Pawnees, of the Northern Cheyennes, and the Poncas, which I have found good reason very much to regret.

More extensive observation and study of the matter gradually convinced me that this was a mistaken policy ; that it would be vastly better for the Indians and more in accordance with justice as well as wise expediency to respect their home attachments, to leave them upon the lands they occupied, provided such lands were capable of yielding them a sustenance by agriculture or pastoral pursuits, and to begin and follow up the practice of introducing among them the habits and occupations of civilized life on the ground they inhabited. It became also clear to me that the maintenance of the system of large reservations against the pressure of white immigration and settlement would in the course of time become impracticable. The policy of changing, shifting, and consolidating reservations for the purpose above stated was therefore abandoned, except in cases where the lands held by the Indians were not capable of useful development, and other lands better adapted to their advancement could be assigned to them.

The policy which, during the larger part of this administrative period, was pursued as a fixed line of conduct is the following : to respect such rights as the Indians have in the land they occupy ; to make changes only where such lands were found to be unsuitable for agriculture and herding ; to acquaint the Indians with the requirements of civilized life by education ; to introduce among them various kinds of work, by practical impulse and instruction ; gradually to inspire them with a sense of responsibility through the ownership of private property and a growing dependence for their support upon their own efforts ; to afford to them all facilities of trade consistent with their safety, as to the disposition of the products of their labor and industry for their own advantage ; to allot to them lands in severalty with individual ownership, and a fee-simple title inalienable for a certain period ; then, with their consent and for their benefit, to dispose of such lands as they cannot cultivate and use themselves, to the white settlers ; to dissolve, by gradual steps, their tribal cohesion, and merge them in the body politic as independent and self-relying men invested with all the rights which other inhabitants of the country possess.

Having thus fixed the ultimate end to be accomplished as well as indicated in general terms the means by which it is to be reached, in the shape of a clearly-defined policy, the department proceeded not only to continue the promotion of those civilizing influences which already had been set to work, but also to add others which so far had not been adopted.

AGRICULTURE AND HERDING.

In their agricultural pursuits the Indians have made commendable progress during the period of this administration. The uncivilized Indians have during the past year broken 27,105 acres of land ; they have cultivated 168,340 ; they raised 408,812 bushels of wheat, 604,103 bushels of corn, 224,899 bushels of oats and barley, 375,843 bushels of vegetables ; they cut 23,245 tons of hay ; they owned 211,981 horses ; they

had 78,939 head of cattle, 40,381 swine, and 864,216 sheep; they occupied 12,507 houses, they built during the year 1,639. The civilized tribes in the Indian Territory cultivated this year 314,398 acres; raised 336,424 bushels of wheat, 2,346,042 bushels of corn, 124,568 bushels of oats and barley, 595,000 bushels of vegetables, cut 124,000 tons of hay, and raised 16,800 bales of cotton. The uncivilized and the civilized Indians, therefore, together cultivated 482,738 acres; that is about one and three-quarters acres to each man, woman, and child, assuming the estimate that the whole Indian population is about 250,000 to be correct. They raised 745,236 bushels of wheat, 2,950,145 bushels of corn, 349,467 bushels of oats and barley, 970,843 bushels of vegetables, and 16,800 bales of cotton; they cut 201,245 tons of hay. I find in the statistics of 1876, the year before this administration came into power, that the quantity of wheat raised was 483,619 bushels, inclusive of 20,365 raised by the government employés at the agencies; 2,257,428 bushels of corn, inclusive of 27,968 bushels raised by the government employés; 155,112 bushels of oats and barley, inclusive of 20,332 raised by government employés; 313,254 bushels of vegetables, inclusive of 35,205 bushels by government employés; 116,097 tons of hay cut, inclusive of 92,882 by government employés. In addition to that there were 354 tons of melons raised, inclusive of 51 by government employés, and 924 tons of pumpkins, inclusive of 48 raised by government employés. It would appear from these statistics that the agricultural labor by the Indians since 1876 has been well nigh doubled in quantity and value. It may be remarked here that with every year these statistics are becoming more accurate and reliable; formerly they consisted in great part of mere rough estimates.

It is my firm belief that the agricultural industry of the Indians would be greatly stimulated and its product very much increased if assurance were given to them that they will be secure in the possession of their lands. I find that in a considerable number of cases Indians are not as willing as they should be to make permanent improvements for the avowed reason that they entertain doubts as to whether those improvements will redound to their own benefit. From all sides requests made by Indians are brought to the knowledge of the department that the government should give them such a title to their lands as is held by white men. I consider it therefore of the highest importance that the measure I urgently recommended allotting agricultural lands among the Indians in severalty, and giving them individual title inalienable for a certain period, be enacted without delay. The number of those who still desire to adhere to their old habits of life, seeking their sustenance by the chase or depending entirely upon supplies furnished by the government is rapidly decreasing. Care has been taken to convince them that the disappearance of game and the constantly progressing settlement of the country by whites are rendering a change in their occupations absolutely inevitable; and that conviction is taking possession of their minds to a greater extent than ever before.

It may be said that exceptions to this rule are becoming rare, and that if now proper measures are taken to secure them in the individual ownership of land, and to aid them liberally in their agricultural pursuits by furnishing them implements and cattle, they will in a comparative short space of time result in the permanent settlement of most of those tribes and bands which but a few years ago were roaming through the country as savages.

OTHER THAN AGRICULTURAL PURSUITS.

One of the most fruitful measures of the present administration has been the introduction of freighting and mechanical pursuits among the Indians. In last year's report I had the pleasure to state that the experiment of employing Indians as freighters with their own ponies had been completely successful. This year's experience has been such as to confirm my conviction that this measure has in its effects been one of the most beneficent innovations ever made in Indian management. The Indians so employed have not only continued to prove themselves the most faithful, efficient, trustworthy, and economical freighters the government ever had, but they have become fond of this occupation and gradually more skilled in carrying it on. The Commissioner of Indian Affairs reports that the Kiowas and Comanches in the Indian Territory, and the Sioux at the Pine Ridge and Rosebud Agencies, have transported during the past year not less than eight million pounds of supplies and annuity goods, over distances of 165, 160, 200, and miles, respectively; and in compensation therefor, they have received the sum of \$115,900, which, although appearing large, has been a considerable saving compared with the amounts formerly paid to white transportation contractors. "So popular has this branch of industry become, that the demands of the Indians for freighting are largely in excess of the quantity of government freight to be transported; and the letting of a transportation contract for Indian goods to a white man would be deemed an infringement on their rights and privileges." * * "Skill and care in the management of their teams, despatch in handling and forwarding of the freight, and absolute honesty and trustworthiness in the care of the goods *in transitu*, have characterized the Indian transportation service; not a package has been lost, not a case or bale broken open or tampered with. The success of the enterprise has made it a permanent feature in the policy of Indian civilization."

At the beginning of this administration no freighting was done by Indians. Last year the number of Indian freight wagons running was stated at 1,356. This year it has been nearly 2,000. Indian freighting has been gradually introduced at the Cheyenne and Arapaho, Kiowa and Comanche, Devil's Lake, Sisseton, Fort Hall, Osage, Kaw, Peoria, Ponca, Oakland, Sac and Fox, Pottawatomie, White Earth, Grand Nemaha, Western Shoshone, Grand Ronde, Siletz, Warm Spring, Greer Bay, Yakama, Shoshone, Rosebud, and Pine Ridge Agencies, and

addition to this the Uintah Utes have this fall undertaken to transport the goods and supplies purchased for them.

In several instances I have seen Indian freighters employed by white people living near the Indian camps, and I have no doubt that this industry can be greatly extended aside from the transportation of government goods. It has introduced thousands of Indians formerly idle and shiftless to habits of industry, inspired them with a desire to earn money and accustomed them to its prudent use.

In my report of last year I stated the number of Indian youth learning trades in various work-shops at the agencies and elsewhere as 185. This number has since been increased to 358. The policy of employing Indians as workmen and even as foremen and machinists at the agencies has been continued and extended with great success. Brick-making has been begun. Houses for the Indians are now almost exclusively built by the Indians themselves. The aptitude shown by the Indians for mechanical work has in many cases been surprising and deserves every possible encouragement.

EDUCATION.

Expressions of an anxious desire on the part of the Indians belonging to the so-called wild tribes to have their children instructed in the ways of civilized life have grown so numerous and urgent, that the inadequacy of the means placed at the disposal of the department for this purpose has become particularly painful. I stated in my last report that mere day schools upon the Indian reservations have, in many respects, proved an insufficient agency for the education of Indian youth. The simple reason is that they do not withdraw the pupils from the influences of their home surroundings in such a manner as to facilitate a change in their habits of daily life. To this end boarding-schools are required, where pupils can be instructed, not only in the elementary branches of knowledge, but also in house-work, mechanical pursuits, and other civilized occupations. In fact it is just as necessary to teach Indian children how to live as how to read and write. The appropriations made by Congress permitted the opening of only three additional boarding-schools during the past year; but arrangements were made for erecting eleven school buildings the coming season, and for the establishment of thirteen new schools of that kind, which, however, will satisfy the demands of only a limited number of Indians who have so far been without such facilities. In order to put these schools in full operation, further appropriations by Congress at the next session will be required. I desire to call special attention to the report of the Commissioner of Indian Affairs upon this subject. He sets forth plainly how utterly insufficient the means at the disposal of the department have been so far to afford to even one-half of the Indian children on the different reservations the most necessary educational facilities; and I deem it my duty to repeat that false economy in this respect at

the present moment, when the desire for the education of their children is so general and so urgent among the Indians, would be particularly unwise.

In my report of last year I spoke of the promising results of Indian education at the normal school at Hampton, Va., under the direction of General Armstrong. The number of Indian children at that establishment is being considerably increased. The institution has been visited by many persons interested in that important work, and the gratifying results gained have been evident to all.

Last year I spoke also of the Indian school at Carlisle, then just established by this department, under the superintendency of Captain Pratt, as an experiment. It may now be said that it is a mere experiment no longer. The progress made by the Indian pupils there as well as at Hampton in the acquisition of elementary knowledge as well as in agricultural and mechanical work has been sufficient to demonstrate the capacity of the Indian for civilized pursuits. The pupils are instructed not only in the English language, in reading, writing, lower mathematics, geography, &c., but the girls are educated in household work, and a considerable number of the boys are employed as apprentices in blacksmithing, carpentering, shoemaking, harness making, wagon building, tin smithing, tailoring, in a printing office, and in farm work. The progress made by some of them has been remarkably rapid, and in almost all cases satisfactory. The number of pupils at Carlisle has been increased to 196. Some of the products of their labor were exhibited at the county fair, and attracted general and favorable attention. The school is now able to produce some articles to be used at the different Indian agencies, such as shoes, tin ware, harness, and wagons, and when the pupils return to their tribes they can be profitably employed, not only as practical mechanics but also as instructors of their people.

A similar school has been established at Forest Grove in Oregon, under the superintendency of Lieutenant Wilkinson, for the education of Indian boys and girls on the Pacific Coast. It has been in operation since February last, and is conducted upon the same principles and with equal success as the schools at Hampton and Carlisle. It has now 40 pupils, representing six different tribes, but the buildings erected are large enough to accommodate 150. There are many applications for admission which will be gratified as funds can be made available for that purpose. Instructions have been given to increase the number of pupils to one hundred. In addition to this, during last year 36 children have been selected from the tribe of Eastern Cherokees and placed in boarding schools in North Carolina, 12 girls at Asheville and 12 boys each at Weaverville and Trinity College, where, aside from elementary instruction, they are to receive training in industrial pursuits. The Indian pupils at Hampton represent thirteen different agencies. At Carlisle there are boys and girls

belonging to various bands of the Sioux, Cheyennes, Arapahoes, Kiowas, Comanches, Pawnees, Menomonees, Iowas, Sac and Fox, Lipans, Poncas, Nez Percés, Wichitas, Apaches, and Pueblos. About two-thirds of them are children of chiefs and prominent men. A school committee of chiefs and headmen from nine Sioux Agencies on the Missouri River visited Carlisle and Hampton last summer. Likewise delegations from the Lake Superior Chippewas, the Crows, the Shoshones and Bannacks of Idaho, and the Cheyennes and Arapahoes of the Indian Territory. They were all highly delighted with the care taken of the children and the progress they had made in the arts of the white man, and promised their active support and co-operation.

The favor which these schools find with the influential men of the different Indian tribes is of great importance as to the effect to be produced upon the advancement of the Indians generally. Formerly it was thought that Indian children so educated would speedily relapse into the savage habits of their people as soon as they returned to them. This was true as long as all the home influences to be found among the Indian tribes were hostile to the education of any of their members, and those who had received such an education found themselves therefore isolated and despised. This obstructive spirit has now been superseded by a very general and anxious desire of Indian chiefs and influential men to see their children raised in the scale of civilization, and the same influences which formerly were so effective in driving educated Indians back into the savage habits of the multitude surrounding them are now employed in turning the education received by a comparatively few to the advantage of the many. The circumstances surrounding the educated Indian when now returning to his tribe are therefore radically changed. In the old time the educated Indian would have found his people thinking of nothing but their savage pursuits and pleasures, incapable of appreciating his superior knowledge and accomplishments, rather inclined to deride them as useless. Now he will find multitudes of parents anxious to have their children educated like him, and, if possible, to employ him for that purpose. An Indian wagon or harness maker returning to a wild Indian tribe years ago would have found no wagons or harness upon which to practice his skill; but sent back there now, when wagons and harness are in general and profitable use, that skill will be in active and general requisition. And so it is in many other things. I therefore feel warranted in saying that the results gained by this system of education will no longer be apt to pass away as before, but, if properly pursued, will be lasting and generally beneficial. It is, under such circumstances, scarcely necessary to characterize the charge recently made, that Indian children were taken to Hampton and Carlisle by force, against the will of their parents, as utterly groundless. On the contrary, the number of applications on the part of Indian parents to have their children admitted to these schools has been far in excess of our means to accommodate them.

A considerable number of the Indian boys and girls at Hampton and Carlisle have, during the summer vacation, been intrusted to the care of private families in Pennsylvania and Massachusetts, where they have received very valuable lessons in household economy and farming, and where they were under the elevating influence of cultivated homes. Their conduct has been generally commended. The number of Indian children educated in these schools is at present necessarily small in proportion to the whole number of children of school age; but the system is capable of great extension, if only the necessary means are provided. It is a mere question of money and of wise and active supervision. In no direction could money be more usefully employed. The success of the schools at Hampton and Carlisle has attracted the sympathy of many benevolent men and women throughout the country, and I have to express my thanks to them for valuable donations with which the schools have been aided. But the continuance and development of these government institutions cannot and ought not to depend upon private munificence. So far the expenses have been defrayed from the civilization fund at the disposal of this Department; but that fund has already been largely drawn upon in establishing and sustaining Indian education at these institutions, and cannot be depended upon to last much longer, especially if the system is extended as it should be. The continuance of this work will then depend upon specific appropriations by Congress, and I cannot too warmly recommend this subject to the favorable consideration of our legislators. As each school is capable of taking care of only a limited number of pupils, the number of such institutions should be increased. There are government buildings no longer used which might be profitably employed for that purpose, and they certainly can be used for no worthier object. It is in contemplation to establish another Indian school of this kind in some unoccupied public buildings in the neighborhood of Washington, where it would be easily accessible for the inspection of members of Congress, and I hope this plan may soon be carried out.

INDIAN POLICE.

Another civilizing agency largely introduced under the present administration was the organization of a police force consisting of Indians. It has been put in operation at forty agencies and the force consists now of 162 officers and 653 privates. The duties of the policemen, performed under the direction of the agent, consist in acting as guards at annuity payments and rendering assistance and preserving order during ration issues and protecting agency buildings and property: in returning truant pupils to school: in searching for and returning lost or stolen property, whether belonging to Indians or white men: in preventing depredations on timber and the introduction of whisky on the reservation; in arresting or driving off whisky-sellers, horse and cattle thieves; in making arrests for disorderly conduct, drunkenness, wife-beating, theft,

~~and other offenses; in turning over offenders to the civil authorities; in serving as couriers and messengers; in keeping the agents informed as to births and deaths in the tribe; in notifying him of the arrival on the reservation of strangers—whites or Indians; in accompanying and protecting surveying parties, and, in general, such other duties as in civilized communities are intrusted to an organized police force.~~

The Commissioner of Indian Affairs states that "special reports as to the character and efficiency of the services rendered by the police have recently been called for from its agents by this bureau, and those reports bear uniform testimony to the value and reliability of the police service, and to the fact that its maintenance, which was at first undertaken as an experiment, is now looked upon as a necessity."

But no less important than the police services rendered is the moral influence which this institution is apt to exercise upon the tribes among which it is active. It impresses the minds of the Indians with the authority of law; it discountenances and discourages their traditional practice of taking personal revenge for injuries received; it imbues them with a sense of duty and individual responsibility; it accustoms a considerable number of young men among them to a moral discipline formerly unknown to them; it inspires them with the pride of good conduct, as only men of exemplary habits are kept in the police force, it being the rule that every one of them who renders himself guilty of any transgression affecting his character is immediately discharged; it strengthens the authority of the government as against that of the chiefs by the active support of the Indians themselves, and thus prepares them for the dissolution of their tribal relations and their incorporation in the great body of the American people. In all these respects the effect of the police service upon the tribes has been very marked. I have repeatedly recommended that the pay of Indian policemen, now fixed at \$5 per month for privates and \$8 for officers, be increased. It is essential that the best young men of each tribe be obtainable for the police force, but the rate of pay is so low that young Indians can easily earn much higher wages as freighters and laborers, and it is a subject of great dissatisfaction among them that a policeman, who considers himself the soldier of the government, should receive only one third of what an Indian scout in the military service receives for the discharge of duties no more important. The consequence is, that as the different tribes progress in civilization it becomes more difficult to obtain good young men for the police force. At two agencies the force had to be disbanded for this reason. I therefore repeat once more my urgent recommendation that the pay of policemen and their officers be remitted to the discretion of the Indian Office with a maximum to be fixed by law, and as that maximum I would suggest the pay of Indian scouts employed by the Army.

LAND TITLES IN SEVERALTY.

I mentioned before that the feeling of uncertainty which prevails among the Indians as to the permanency of their possession of the lands

they occupy has proved in many cases a serious impediment to their improvement and progress. From all quarters we receive expressions of a desire on the part of the Indians to have the land they occupy and cultivate secured to them by the "white man's paper," that is, a patent equal in legal force to that by which white men hold title to their land. Bills have been submitted to Congress for two sessions providing for the division of farm tracts among the Indians in severalty on their respective reservations; the issuance of patents to them individually and their investment with a fee-simple title to their farms inalienable for a certain number of years until they may be presumed to have overcome the improvident habits in which a large part of the present generation have grown up; and, this being accomplished, for the disposition of the residue of the reservations not occupied and used by the Indians, with their consent and for their benefit, to white settlers. It was hoped that this measure would pass before the adjournment of the last session. Had it become a law a very large number of Indians would have been so settled by this time. In this expectation the issuance of patents not containing the important clause of temporary inalienability, which is authorized by a few Indian treaties, has been withheld until a general law should insure to all titles of greater security. It is to be hoped that this important measure will now receive the earliest possible consideration and action by Congress. I look upon it as the most essential step in the solution of the Indian problem. It will inspire the Indians with a feeling of assurance as to the permanency of their ownership of the lands they occupy and cultivate; it will give them a clear and legal standing as landed proprietors in the courts of law; it will secure to them for the first time fixed homes under the protection of the same law under which white men own theirs; it will eventually open to settlement by white men the large tracts of land now belonging to the reservations, but not used by the Indians. It will thus put the relations between the Indians and their white neighbors in the Western country upon a new basis, by gradually doing away with the system of large reservations, which has so frequently provoked those encroachments which in the past have led to so much cruel injustice and so many disastrous collisions. It will also by the sale, with their consent, of reservation lands not used by the Indians, create for the benefit of the Indians a fund, which will gradually relieve the government of those expenditures which have now to be provided for by appropriations. It will be the most effective measure to place Indians and white men upon an equal footing as to the protection and restraints of laws common to both. I desire also to call attention once more to the bill repeatedly introduced in Congress, extending over Indian reservations the government of the laws of the States or Territories in which such reservations are located, giving the Indians standing in the courts and securing to them the full benefit of the laws. I venture to express the hope that Congress may not adjourn again without having taken action upon

these important measures, so essential to the progress and security of our Indian wards.

RAILROADS THROUGH INDIAN RESERVATIONS.

It has been the policy of this department to facilitate the building of railroads through Indian reservations as much as laws and treaties permitted, at the same time in every instance protecting the interests and rights of the Indians. In a few cases a certain prejudice prevailing among the Indians against the establishment of thoroughfares of trade through their reservations had to be overcome. But it was made clear to them that it is important for their security and well-being not to provoke hostile feelings on the part of the white people by needlessly offering obstacles to the progress of civilization and to the execution of enterprises generally useful. Neither can it be doubted that it will ultimately be best for the Indians to come into contact with truly civilizing agencies. In the same measure as the Indians become producers, agriculturists, and herders, the proximity of railroads will become important to facilitate the transportation, and thereby enhance the value, of their products. When application is made by railroad companies for permission to pass through an Indian reservation, the Indians are assembled in council and consulted as to their views and wishes, and as to the measure of compensation to be paid by the railroad company seeking the privilege. In this way the assent of the Indians has, so far, in every case been readily obtained, and the required compensation paid by the respective companies. Rights of way have thus been granted through the Sisseton Reserve, in Dakota, to the Chicago, Milwaukee and Saint Paul Railway Company; through the Otoe and Missouria Reserve, in Nebraska, to the Republican Valley Railroad Company; through the Winnebago and Omaha Reserve, in Nebraska, to the Saint Paul and Sioux City Railroad Company; and through the Walker River Reservation, in Nevada, to the Carson and Colorado Railroad Company.

The Dakota Central and the Chicago, Milwaukee and Saint Paul Railroads are now making preliminary surveys, with the consent of the Indians and under an escort of Indian police, through the great Sioux Reservation, in Dakota, to connect the mining districts of the Black Hills with the Missouri River and Eastern railroad systems. Negotiations with the Indians for the right of way are now pending, and a satisfactory adjustment of the question of compensation is expected in the near future.

GENERAL REMARKS.

From its very beginning the Indian service may be said to have been the "best abused" branch of the government. While the Indian question is discussed by conscientious and well-informed persons with good judgment and a fair appreciation of circumstances, and their praise and censure are alike valuable, the number of American citizens "who know

all about Indian matters" without ever having given a moment's study to that large and complicated subject, has been incredibly great, and the readiness and volubility of their criticism, mostly condemnatory of everything that is done, seems inspired by an inexhaustible fertility of imagination as to facts. No story, ever so extravagant and absurd, can be told about Indian management without finding ready belief. But recently I saw a statement, seriously put forth in respectable newspapers, that the guns and ammunition with which the Indians fight our soldiers are to this day regularly furnished to the savages by the Indian Bureau, or are permitted to be sold to them by licensed traders on the Indian reservations. Whenever an Indian misconducts himself, or the greed or recklessness of white men provoke an Indian trouble, an outcry follows about the disgraceful remissness of the government, and it is at once proclaimed that we are as far as ever from the solution of the Indian problem.

No doubt the history of Indian management, under military as well as civil control, shows many instances of mistake, failure, and wrongdoing; but no fair-minded man can examine that history or the present state of things without admitting that the government has had to contend against enormous difficulties, and that the greatest of these and the most prolific of trouble was the pushing of settlements into the country inhabited by the Indians and the crowding out of the latter, regardless of their rights of occupancy, in many cases guaranteed by treaties. This difficulty could in many instances not be controlled by the Indian Department, which was held responsible for many complications and evils— not in its power to avert. It must also be acknowledged that while every disturbance was generally and loudly noticed and commented upon, the good things done escaped in many, if not most cases, public observation and recognition.

It cannot be my purpose, however, here to go into a minute review— of the past. Looking at the present condition of things it may be said, without exaggeration, that on the whole the Indian situation is now more hopeful than ever before. The desire of the Indians to maintain friendly relations with their white neighbors, to go to work for their own support, to cultivate the soil, to acquire permanent homes— to have their children educated, and to assimilate themselves to the civilization of the country, is growing stronger and more general every day. The measures prosecuted and in part originated under this administration, which have been mentioned before: the enlargement of the agricultural activity of the Indians; the distribution of cattle among them to promote the industry of herding; the extensive introduction of the freighting business; the encouragement of mechanics' industry; the institution of the Indian police, stimulating their respect for law and authority; the increase of their educational facilities, notably among them the education of Indians at Hampton and in North Carolina, and the establishment, by the government, of the Indian

schools at Carlisle and Forest Grove, may be said to have been very effective in this direction. When, in addition to all this, the bill advocated by this department to allot lands among the Indians in severalty, and to confer upon them individual title in fee simple, inalienable for a certain period, shall have been made a law, and that law shall have been applied among all the Indian tribes, which, in my opinion, it can be in a few years, and the rights of the Indians are accorded equal protection in the courts of the country with those of white men, then it may be said that all essential measures will have been taken to solve the Indian problem, and the time may be confidently looked for when the Indian population may be merged in the great body of American citizenship. We are on the straight road to that solution and nearer to its accomplishment than is generally supposed. It is essential, however, that the policy here set forth should be carefully protected against hostile interferences and guarded against ill-advised precipitancy.

The management of Indian affairs has to deal with two distinct currents of sentiment in this country. The one is that Indians will not work; that to recognize any rights of the Indians is a wrong to the white people; that to secure them in the possession of lands, whatever title they may have to them, is an obstruction to the progress of the country, by depriving whites of the lands they ought to have for their use; and that the only proper thing to do is to get the Indians out of the way altogether. This theory, I regret to say, is most strongly upheld in that part of the country which is inhabited by most of the Indians themselves. The pressure of the white population upon Indian reservations, animated with this spirit, has, in fact, been the principal source of our Indian troubles. It is scarcely necessary to point out to fair-minded men the injustice and inhumanity of such principles, or to show to those who have the experience of the past before their eyes that to act upon those principles would not only be a great wrong to the race which was the original occupant of this continent, but must also lead to most costly and disastrous conflicts with them. The other current of opinion is that the Indians, even as they now are, must at once be relieved of all restraints to which white people are not subjected, and must, without further preparation, be accorded the enjoyment and exercise of all the rights which the civilized citizens of this country enjoy and exercise. This view is entertained and advocated most warmly in that part of the country which is farthest removed from the ground upon which the Indian problem has to be solved. While this will certainly be the ultimate end of a wise policy, and should be applied to all who are capable of intelligently exercising and enjoying such rights, it must be admitted that the number of Indians fitted for their intelligent enjoyment and exercise, and, in fact, even for an intelligent understanding and appreciation of them, is still comparatively small, and that to throw the uncivilized red man, such as he now is, into the struggles and competitions of life with his white neighbor, without sufficient preparation and active

service is, I willingly concede; but I am also convinced that the substitution of military management would not in itself obviate existing difficulties, but would add others in effect likely to prove still more serious.

A careful investigation of the subject will convince any fair-minded inquirer that military management will not be more economical in the point of pecuniary outlays than the civil management is now. Of greater importance is the ascertained fact that the Indians have generally a strong dislike for military control—not for the mere reason that the presence of an armed force is distasteful to them, for the success of our Indian police system shows that they submit to the restraints imposed upon them by such a force with great willingness, and exercise the police regulations under the direction of prudent agents with great alacrity; but there is a variety of other reasons for their repugnance which it would lead me too far to mention. It is easy to understand that if the management of Indian affairs were turned over to the military service the interests of the Indians and the interests and convenience of the Army might not always agree; and it is from no disrespect to the Army when I express the opinion that under such circumstances it might sometimes be questionable which interests would have the preference. It is certainly true, and within my own knowledge, that some military officers have shown great aptitude for the management of Indians in their peaceful pursuits and relations; but it is also true that the very spirit of the calling of military men is apt to suggest the application of force as one of the first resorts, even in the cases where peaceful teaching and patient guiding are most required. There have been many instances of this kind. Without going into a full statement of all the reasons upon which my conviction in this respect is based, I will simply quote, with the strongest possible approval, the recommendation of the Peace Commission of 1868, couched in the following language: "This brings us to consider the much mooted question whether the bureau should belong to the civil or military department of the government. To determine this properly we must first know what is to be the future treatment of the Indians. If we intend to have war with them, the bureau should go the Secretary of War; if we intend to have peace, it should be in the civil department. Under the plan which we have suggested, the chief duties of the bureau will be to educate and instruct in the peaceful arts; in other words, to civilize the savages. The military arm of the government is not the most naturally adapted to discharge duties of this character. We have the highest possible appreciation of the officers of the Army, and fully recognize their prudence, integrity and honor; but we are satisfied that no one in a thousand would like to teach Indian children the principles of civilization at sword-point. These are emphatically not the natural functions of an army." This report was signed by Gen. J. S. Grant, Gen. G. T. Gordon, a general of the Army, Brig. Gen. W. H. S. French, Col. A. J. Smith, Capt. A. C. Terry, and Bvt. Maj. Gen. J. L. Wilson.

Under the circumstances described in this report, it must be evident that the mission of Indian management will henceforth be, more than ever, a mission of peace and not a mission of war. The principal agencies which must be depended upon for the solution of the Indian problem are work, education, the permanent settlement upon agricultural and pasture lands, security of title, and equal protection of the law. All these are civil agencies, and the more the land interests of the Indians press into the foreground, the more necessary will it be that Indian management be connected with that branch of the service which has the administration of public lands under its special control.

It has also been suggested that the Indian service, owing to its importance, should cease to be a mere bureau in the Interior and be intrusted to an independent department. I should consider this advisable only if the head of that department could at the same time hold a place in the Cabinet, enabling him to make his views heard in its deliberations and to communicate on equal terms with the heads of the other departments of the executive branch of the government. But this would involve the larger question whether it would be wise to increase the number of Cabinet officers, and until this question is decided in the affirmative it would in my opinion be most advantageous to the public interest to permit the Indian service to remain under the direction of the Secretary of the Interior, to be thus represented in the executive council.

Finally, I desire to say that it has not been the policy of this department under my administration, while avoiding all unnecessary outlays of money, to cut down expenses merely for the purpose of making a striking exhibition of economy. The history of Indian affairs shows that ill-judged parsimony has not unfrequently led to serious trouble and very costly complications. I am now convinced that generous appropriations for agricultural implements, for stock cattle to be distributed among Indians, and for educational facilities, made at this time, when the temper of our whole Indian population is such as to receive such aid in the right spirit, and to use the advantages conferred for general and rapid advancement, will produce results certain to accelerate the solution of the greatest difficulties we have so far been contending with, and, consequently, to bring about a great saving of money in the future. When an Indian lives in a house which he considers his own and that of his family, as now thousands of families are living and many more thousands desire to live; when he cultivates his acres, has them fenced by his own labor, and enjoys the product of his agricultural work, either by his own consumption or the sale of a surplus; when he owns his plow and his wagon, and uses the latter, with his ponies, in freighting, by which he earns liberal wages; when he has his cows, and swine, and Poultry on his land, the care of which he finds useful and profitable; when he can send his children to school, and begins to hope that they may become as civilized and prosperous as white people, he will soon cease to think of leading the life of a nomad, and the thought of war

will no longer have any charm for him. He will gradually become ashamed of being a beggar, as many of them have expressed themselves already, and feel a pride formerly little known to him, to depend for his own sustenance and that of his family upon his own efforts. This is not a mere fancy picture, for I have myself observed a multitude of examples of this kind, and manifestations of urgent desire in this direction on the part of Indians are coming to this department in constantly increasing numbers. It appears, therefore, of the highest importance that the government should promptly take advantage of this disposition and stimulate it with generous aid until the final solution of the problem is reached.

THE UTES.

At the time I rendered my last report, the settlement of the difficulties which had occurred on the Ute Reservation in September, 1879, was still the subject of negotiations between the Ute tribe and the commission appointed for that purpose, consisting of General Hatch, Mr. Adams, and Chief Ouray. Those negotiations resulted in the surrender of Chief Douglass, of the White River Utes, to the authorities of the United States. The commission recommended that a delegation, representing the various bands of the Ute tribe, be permitted to visit Washington for the purpose of effecting such a settlement as would prevent further troubles. Several headmen of the Southern Utes, under the leadership of their chief, Ignacio, and of the Uncompahgre Utes, headed by Ouray, as well as of the White River Utes, were received here, and after prolonged negotiations these representatives of the Ute tribe consented to the surrender of the whole Ute Reservation in Colorado, on condition that the Ute Indians be settled in severalty, with an individual title in fee simple to their farms on certain small tracts of land in that reservation and immediately adjoining it, the White River Utes to go to the Uintah Reservation, and that the annuities due be paid to them, and further annuities be provided for; the Utes thenceforth to be as individuals occupying their farm tracts respectively under the jurisdiction of local laws and courts. This arrangement was considered a measure of great importance, not only for the reason that it would be apt to prevent a costly and destructive Indian war, but also that for the first time in the history of Indian management it provided for the formal discontinuance of the tribal existence of an Indian nation and for their individual settlement as farmers like other inhabitants of the country under the laws of the land. This agreement was not to have binding force until ratified by three-fourths of all the male adult members of the different bands of the Ute tribe, the ratification to be supervised by a commission which, after the completed ratification, was also to make the payments agreed upon and to superintend the settlement of the Indians upon the farm lands designated for them. This agreement was submitted to Congress with the draught of a bill to give it the force of law. Prompt action was repeatedly urged, so that its most important

provisions might be carried out before the winter season should set in; but action was had only after a delay of many weeks. The commission provided for by law, composed of Messrs. George W. Manypenny, John B. Bowman, John J. Russell, Alfred B. Meacham, and Otto Mears, proceeded to the Ute Reservation to carry the law into effect. In order to obtain the ratification of the agreement it was necessary to call together the Indians who were scattered over a large extent of country. The sudden and deplorable death of Chief Ouray, a man of advanced views, great sagacity, remarkable tact and noble impulses, indeed probably the wisest Indian of this generation, whose influence upon his people had always been in favor of peace, good order, and progress, seemed for a time to render the success of the labors of the commission doubtful. But the ratification of the agreement was finally signed by the requisite number of Indians within the limitation of time specified by the act of Congress. The commission reported that the Indians, presumably guilty of the murder of Agent Meeker and the agency employés, had fled beyond the boundaries of the United States. The payment of annuities due has been proceeded with according to law. It would have been possible to make the necessary preparations for the individual settlement of the Ute Indians upon the farm lands designated for them had not the winter season intervened. This delay is to be regretted, and I can only say that it would have been avoided had Congress acted as promptly upon the agreement as was repeatedly and urgently recommended by this department.

A new trouble threatened seriously to disturb peace and quiet on the Ute Reservation again, after the ratification of the agreement had been obtained, and everything seemed to favor a final and prosperous settlement of the trouble. On the evening of the 29th of September, a young Ute Indian, son of a chief, was killed by a young man named Jackson, belonging to a party of freighters. It has been alleged by some that the Indian fired first at the white men, and that Jackson killed him in self-defense. On the other hand, the report of Major Offley, Nineteenth Regiment United States Infantry, represents the conduct of the Indian as friendly and peaceable, and, in the language of Captain Pollock, Third United States Infantry, whom Major Offley quotes, calls the deed "a wanton and unprovoked murder of an Indian by a reckless, half-drunk teamster." Jackson was arrested, and, under the escort of three white citizens of Colorado and one Indian, he was to be taken to Gunnison City to be tried; but the party was intercepted on its way, by a number of Indians and white men; the prisoner was taken from them, and his fate is not known, although the probability is that he was killed. In Major Offley's report the opinion is expressed that this was done at the instigation of some white men, possibly freighters, who deemed the killing of the murderer of the young Indian necessary to protect themselves in the pursuit of their business from the possible revenge of the Indians. Captain Pollock calls this "a clear case of lynching, which,

as much as it might be deplored, is not an uncommon occurrence throughout the country in the midst of civilization and enlightenment." Great excitement ensued in the settlements near the Ute Reservation; and the trial of Mr. Berry, the United States Indian agent, was vociferously demanded on the ground that he, in confiding Jackson to the escort of three white men and one Indian, had deliberately betrayed him into the hands of Indians eager to avenge the death of one of their people. Mr. Berry was subsequently arrested by the United States marshal, and taken before the United States district court at Denver, where his case is now pending. Before his arrest he showed great skill and influence over the Indians, in keeping them quiet and preventing further disturbance on their part. It is to be hoped that the State and local authorities in Colorado will use their best judgment and endeavors to allay the excitement existing in that State, so as to restrain evil-disposed persons from invading the Indian reservation and provoking collisions with the Indians, which would be especially deplorable at a time when the so-called Ute problem is on the point of successful solution by just and peaceable agencies and in accordance with an agreement successfully concluded.

THE PONCAS.

The case of the Poncas has continued to be a subject of public as well as private attention, on account of the hardships suffered by that tribe in consequence of its removal from Dakota to the Indian Territory. I have repeatedly in my reports expressed the opinion that the Poncas had a serious grievance on account of that removal, and that a generous indemnity was due to them. I am free to say, also, that a clear knowledge of their case at the time of their removal, which happened at the very beginning of the present administration, would have induced me then to oppose it to the extent of the discretion permitted by existing law to this department in such cases. The question how that grievance was to be redressed admitted of two different answers. One was that they should be returned to Dakota and the other that their condition be made as comfortable and prosperous as possible on their new location in the Indian Territory. There were several reasons against their return to Dakota. Their lands in Dakota had, by the treaty of 1868, been ceded to the Sioux, who had been their old enemies, and whose hostile incursions in years past had called forth among the Poncas themselves a desire to get out of their way by removal. The great problem in the management of Indian affairs at that time was to insure the general pacification of the Sioux tribes, in all over 30,000 souls strong. The Sioux occupied the Ponca Reserve for some time in 1877, shortly after the removal of the Poncas to the Indian Territory had taken place. Two large Sioux bands, numbering over 13,000, are now permanently located in the southern part of the great Sioux Reservation, at a distance from the old Ponca Reserve, but within comparatively easy reach. The Poncas could

not be moved back to their old lands without a previous agreement with the Sioux. While it is said that the latter are now more favorably disposed toward the Poncas, and while the conduct of that branch of the Sioux Nation is now very satisfactory, yet it is also a matter of experience that old grudges among Indians, although smoothed over, are apt to be revived by reckless individuals among them, in which case the Poncas, numbering only a few hundreds, would be at a great disadvantage compared with their powerful neighbors. Moreover, Congress had granted neither authority nor money for the removal of the Poncas back to Dakota. I should willingly have recommended the passage of a law and appropriation to that end, there being no interest nor any pride of opinion in the Department that could possibly have prevented such a step—for in the very first report rendered by me after the removal of the Poncas, and after I had become fully aware of the whole character of the transaction, the wrong done to them was frankly acknowledged—had there not been other considerations of superior weight against it. The principal injury suffered by them immediately after their removal, by disease and the death of many of their people, could not be repaired. When they were once settled in the Indian Territory upon land which is acknowledged to be excellent for agricultural and herding purposes, and had made new beginnings in civilized pursuits and the promotion of their well-being, those beginnings would have been destroyed by a second removal, and the whole operation would have had to be repeated. It is but natural that frequent removals of an Indian tribe should have a disastrous effect upon their advancement in civilization and prosperity.

According to the latest reports, their condition is now very much improved. How much better they are situated in a sanitary point of view than immediately after their arrival in the Indian Territory appears from the fact that, according to the returns for the year just passed, there were during that year eleven deaths and fifteen births in the tribe, so that the Poncas have been actually increasing in numbers. Most of them are now living in houses, are tilling the soil, and have been provided with stock cattle for herding. They have school facilities for the education of their children. Their progress would have been greater had they not been kept in a state of restlessness by reports from the outside that they would soon be returned to Dakota, and that therefore they need not apply themselves to the improvement of their condition on the soil they occupy in the Indian Territory. Instead of benefiting them, such reports have evidently inflicted upon them an injury. Nothing would have been more apt to improve their health, raise their spirits, and promote their well-being than steady and fruitful work. That the Poncas feel this themselves appears from a petition which on the 29th of October they addressed to the Commissioner of Indian Affairs, and in which they say "that their young men are unsettled while they think they have a right to their land in Dakota," and that "their tribe will not be finally settled until they have a title to their

all about Indian matters" without ever having given a moment's study to that large and complicated subject, has been incredibly great, and the readiness and volubility of their criticism, mostly condemnatory of everything that is done, seems inspired by an inexhaustible fertility of imagination as to facts. No story, ever so extravagant and absurd, can be told about Indian management without finding ready belief. But recently I saw a statement, seriously put forth in respectable newspapers, that the guns and ammunition with which the Indians fight our soldiers are to this day regularly furnished to the savages by the Indian Bureau, or are permitted to be sold to them by licensed traders on the Indian reservations. Whenever an Indian misconducts himself, or the greed or recklessness of white men provoke an Indian trouble, an outcry follows about the disgraceful remissness of the government, and it is at once proclaimed that we are as far as ever from the solution of the Indian problem.

No doubt the history of Indian management, under military as well as civil control, shows many instances of mistake, failure, and wrongdoing; but no fair-minded man can examine that history or the present state of things without admitting that the government has had to contend against enormous difficulties, and that the greatest of these and the most prolific of trouble was the pushing of settlements into the country inhabited by the Indians and the crowding out of the latter, regardless of their rights of occupancy, in many cases guaranteed by treaties. This difficulty could in many instances not be controlled by the Indian Department, which was held responsible for many complications and evils not in its power to avert. It must also be acknowledged that while every disturbance was generally and loudly noticed and commented upon, the good things done escaped in many, if not most cases, public observation and recognition.

It cannot be my purpose, however, here to go into a minute review of the past. Looking at the present condition of things it may be said, without exaggeration, that on the whole the Indian situation is now more hopeful than ever before. The desire of the Indians to maintain friendly relations with their white neighbors, to go to work for their own support, to cultivate the soil, to acquire permanent homes, to have their children educated, and to assimilate themselves to the civilization of the country, is growing stronger and more general every day. The measures prosecuted and in part originated under this administration, which have been mentioned before: the enlargement of the agricultural activity of the Indians: the distribution of cattle among them to promote the industry of herding: the extensive introduction of the freighting business: the encouragement of mechanical industry: the institution of the Indian police, stimulating their respect for law and authority: the increase of their educational facilities, notably among them the education of Indians at Hampton and in North Carolina, and the establishment, by the government, of the Indian

and possibly the Pawnees. I could, therefore, not have recommended the return of the Poncas to Dakota without at the same time keeping in view the probable necessity of returning other Indian tribes from the Indian Territory to the region originally inhabited by them. This would, in all probability, result in an extensive evacuation of the Indian Territory, and just of that part of it which contains the lands coveted by the intruders, and which lands are held against them on the ground that they are reserved for Indian settlement. It is obvious that the evacuation by the Indians of the region held for Indian settlement, and defended on that very ground against intruders, would be apt greatly to encourage and stimulate the projects of invasion which, although repeatedly repelled, are pursued by evil-disposed persons with persistent activity. The defense of the Indian Territory against that invasion would inevitably become much more precarious, and the breaking down of all barriers before the Indian tribes inhabiting the Territory are prepared for such an event, would, in all probability, be most disastrous to them. While the original removal of the Poncas from the North to the Indian Territory was an injustice to them, yet, that removal and their settlement in the Indian Territory accomplished, the aspect of the question changed very materially, inasmuch as the measure intended to right their wrongs by their return, would be apt to bring a new wrong upon Indian tribes far more numerous, a wrong greater than the injury originally suffered by the Poncas themselves. These are the reasons why, although recognizing the hardships endured by the Poncas, I could not conscientiously recommend their return to Dakota. There is a bill now before Congress providing for that return. If it is to become a law, it should not be without a clear view of the probable consequences. Recommendation has repeatedly been made by this department that Congress provide an appropriation for the purpose of amply indemnifying the Poncas, and that recommendation is now urgently repeated.

VICTORIA'S BAND OF APACHES.

The long guerrilla warfare carried on by Victoria's band of hostile Indians in New Mexico has at last come to a close by the death of Victoria, and the destruction of the larger part of his followers on Mexican soil. In my last annual report, and that of the Commissioner of Indian Affairs, the circumstances which led to the outbreak of hostilities between Victoria's band and the forces of the United States were elaborately set forth. As appears therefrom those circumstances did not consist, as alleged in the report of a military officer, in the persistent efforts to remove Victoria and his followers to the San Carlos Agency, for while such a project was formerly entertained, it had been given up at the time when the outbreak occurred. Victoria had come on the 13th of June, 1879, with a small number of followers to the Mescalero Agency in New Mexico, and upon a conference with the Indian Agent, given his promise to stay there quietly. That promise had been accepted and arrange-

ments were in progress to bring to them their wives and children, who at that time were living on the San Carlos Reservation in Arizona. But the appearance of some officers of the law on the reservation, whom the Indians suspected of having come there for the purpose of arresting them under indictments found against them for horse-stealing and murder, Victoria and his men effected their escape, suddenly left the Mescalero Reservation, took with them other southern Apaches, and resumed their old marauding practices until after many fights and vicissitudes they came to their end. Some remnants of his band seem to be still at large, but it is thought that they can easily be overcome and caught, and that then peace will be restored on our southern frontier.

THE LEMHI AND FORT HALL INDIANS.

Congress at its last session passed an act providing for the settlement of the Lemhi Indians upon Fort Hall Reservation, and also for the cession of a part of that reservation to the United States in consideration of certain annuities to be paid to the Indians affected thereby, subject to the consent of the latter. I had a personal conference with the chief of the Lemhi and Fort Hall Indians at the agency of the latter in August last, in which a majority of the Lemhi Chiefs and headmen declared their unwillingness to abandon their present abode. Their consent to their removal provided for in the law not being obtained, no further steps were taken in that direction. The Fort Hall Indians, on the other hand, declared themselves satisfied with the arrangements made; and it will therefore be necessary so to change the law as to adapt it to this new state of circumstances, which is hereby respectfully recommended.

THE PI-UTES.

Early last winter Chief Winnemucca, his daughter, Sarah Winnemucca, and some headmen of the Pi-Utes, asked permission to come to Washington for the purpose of making certain arrangements for the permanent settlement of their people. That permission was granted and they represented that most of the Pi-Utes scattered over Nevada and Southern Oregon, as well as those settled on the Yakama Reservation in Washington Territory, were desirous to move to the Malheur Reservation in Oregon, for the purpose of cultivating the soil and establishing permanent homes. They received the assurance that this department would facilitate such a movement, provided the Indians concerned really desired it, and that in such case their settlement upon the Malheur Reservation would be aided in every possible manner, but that those Pi-Utes who were at present working for wages, or who were settled on the Yakama Reservation or other lands, and did not desire to remove to the Malheur Reservation, should in no way be forced to do so. On the occasion of my visit to the Pyramid Lake Reservation in Nevada, where I met several chiefs

and headmen of the Pi-Utes, I discovered that among those Pi-Utes who were scattered among the white population and working for wages the desire to remove to the Malheur Agency did not exist, as had been represented to me; that, on the contrary, they wished to continue in their present condition. A great many of them are employed by white people in chopping wood &c doing other jobs of work, for which they are sufficiently paid to make a living; thus they appear to be self-supporting. I met many white men among whom those Indians lived, who declared themselves well satisfied with their presence, and desired that they should stay. Information was also received from Washington Territory, through General Howard, as well as from Agent Wilbur, that the removal of the Pi-Utes—who in consequence of the Bannock war had been taken to the Yakama Reservation—from their present abode to the Malheur Agency would be attended with great danger to the Indians, as well as lead to the breaking up of those beginnings in agricultural work which they had made on the establishment of homes at Yakama. Under such circumstances it was thought best to give up the project of their removal from the Yakama Agency, and the settlement of the other Pi-Utes on the Malheur Reserve as an improper experiment. Arrangements have been begun to establish for the Pi-Utes living in that neighborhood a boarding school at the Pyramid Lake Agency, where their children can receive the benefits of education, which otherwise would not be easily obtainable by them. A special agent was sent to the Malheur Agency for the purpose of ascertaining whether that establishment could not be dispensed with, and its business is now being wound up.

THE CROWS.

With a delegation of the chiefs and headmen of the Crows in Montana, who visited Washington last winter, an agreement was made, providing for the relinquishment of a part of their reservation not used by the Indians, but valuable for its mineral resources; in compensation therefor an annuity was agreed upon to be paid to the Crow Indians. When the chiefs laid this agreement before their people in order to obtain their consent, the latter insisted upon a modification of the agreement, somewhat changing the boundaries of the ceded tract. It is thought that this change will be mutually advantageous, and the bill now before Congress giving to the agreement the force of law should be altered in that respect. While visiting the Crow Reservation, I had conferences with many of the chiefs and headmen of that tribe, who all expressed themselves satisfied with this arrangement, and also desirous of having lands allotted to them in severalty and to receive title therefor. I informed them that their wishes in that respect coincided entirely with the policy of this department, and would be promptly complied with as soon as Congress should have passed a bill submitted to it, giving the department the necessary authority to that end.

THE SIOUX.

Of all Indian tribes, the Sioux Nation has for a long time been regarded as the most important, not only on account of their numerical strength and warlike qualities, but also on account of their geographical location and the many conflicts which for years have disturbed our relations with them. One after another the different bands composing that nation have been pacified, until finally only one of their prominent men, Sitting Bull, and with him a number of restless spirits belonging to different bands, appear to be the only nucleus of a hostile organization. When this administration came into office Sitting Bull with his warriors had fled across the line of the British possessions. A commission, with General Terry at its head, was sent there with the offer that the hostiles might return to the United States if they would give up their arms and horses and consent to be distributed among the different Sioux agencies. That offer was rejected, and it was then hoped that Sitting Bull and his followers might be kept on British territory without a further serious interruption of the peace of our northern frontier. But it soon appeared that the British authorities could not, at any rate did not, keep Sitting Bull and his band of hostiles on the northern side of the line, and that the latter, driven by want, would come upon the territory of the United States for the purpose of hunting, on which occasions they caused much annoyance to the white settlers as well as to our friendly and peaceable Indians. In September last I visited Fort Keogh for the purpose of informing myself of the condition of things in that region, and it became clear to me that Sitting Bull and his band, although they had been repeatedly driven back, would remain a cause of disquietude in the Upper Missouri country until the British authorities could be induced to remove them into the interior of the British possessions far from the American line and there subsist them, which hope it seemed useless to entertain any longer, or until on this side of the line their surrender to the authorities of the United States could be effected. As at last the latter seemed to be the only solution of the problem, measures were pushed to effect the disintegration of that hostile band, and to bring them gradually under the control of this government. A large number of them have surrendered to the military posts near the northern frontier, especially at Fort Keogh, and under the direction of General Miles have been successfully set to work there. It is hoped that the small remnant of them still plunder the control of Sitting Bull will gradually follow that example. When that is accomplished, measures are to be taken so to locate them that they may become permanently settled and cease to be a disturbing element.

The other bands of the Sioux Nation, comprising nearly nine-tenths of its whole numerical strength, located at different agencies in the eastern, and southern part of Dakota, have made very en-

couraging progress in the pursuits of civilized life. Many of them have devoted themselves to agriculture, herding, freighting, and mechanical pursuits with remarkable energy and success.

At the Santee, Sisseton, and Devil's Lake Agencies they are virtually self-supporting. They are located in severalty, living in houses, wear white man's dress, are well provided with farming implements and stock cattle, and their crops during the past year will average ten bushels of wheat, five bushels of corn, and sixteen bushels of vegetables to each member of the tribe. They are still receiving some aid from the government, but are at the same time investing their surplus crops largely in farming implements, cattle, and other appliances of civilized life. At Cheyenne River, Crow Creek, Standing Rock, and Lower Brûlé, where a few years ago the progress of the Indians was seriously retarded by the Sioux war, they have erected 718 houses, broken a large tract of land, and this year raised 41,000 bushels of wheat and corn and 12,000 bushels of vegetables. The Ogalala and Brûlé Sioux, whose chiefs, Red Cloud and Spotted Tail, are well known, removed to the locations they occupy at present in 1878. They now have 700 log houses, cultivate 2,200 acres of land, own 300 mules, 5,600 head of cattle, and 280 swine, in addition to many thousands of horses. This year their crops were seriously injured by an early drought, which caused great disappointment, but they have bestowed great care upon their stock cattle, and should be encouraged by the government in this respect as much as possible. Instead of living together as formerly in crowded camps and villages, they are now scattering over a large extent of ground, locating farms and building homes upon them. Their success in the pursuit of freighting with their own horses has been particularly remarkable. Their conduct, with the exception of one or two inconsiderable disturbances, has been peaceful and satisfactory in every respect. One of these occurrences is worthy of special notice. A small party of Brûlé Sioux, consisting of six young men, stole some horses and shot a white man in Nebraska. Although they were all great favorites with the chiefs and headmen, they were without resistance arrested by the Indian police and turned over to the civil authorities for trial. In the first week of October I received a letter from Chief Spotted Tail inclosing a check for \$332.80, with the request to employ that money, which had been collected by the Indians among themselves, in procuring an attorney to assist the six young Indians, so that while they should be punished if guilty, they might if not guilty have "the chance of a white man" for acquittal. This is one of the signs indicating that the respect for law and authority, and a desire to accommodate themselves to the white man's ways, is rapidly growing among the same Sioux, a large part of whom were still in arms against the government a comparatively short time since, and who, two years ago, according to the predictions of some, could never be depended upon as peaceable Indians "unless they received another thorough whipping."

THE INVASION OF THE INDIAN TERRITORY.

Attempts by evil-disposed persons to invade the Indian Territory and to take possession of certain unoccupied lands there have so far been successfully frustrated by the prompt action of the government, but they have been as persistently repeated. It is reported that another attempt is in preparation now. The military forces of the United States in the Territory are instructed to arrest the intruders and to take proper measures to bring them to justice as they have done heretofore. But it is evident that the penalty imposed upon repeated intrusion into the Indian Territory, which penalty consists in a mere fine and is difficult of enforcement, is not sufficient to deter lawless characters from such undertakings. I concur with the Commissioner in recommending that a law be passed adding the penalty of imprisonment to that of a fine. If this is done invaders will know that such attempts are not without serious risks to them.

In conclusion I desire to express to the War Department my grateful acknowledgments for cordial and prompt co-operation whenever the exigencies of the service called for it.

PUBLIC LANDS.

During the last fiscal year public lands were disposed of as follows:

	Acres
Cash sales	850,740. 63
An increase of 228,160. 63 acres on the sales of the previous year.	
Homestead entries	6,045,570. 60
An increase of 780,420. 61 acres	
Federal military entries	2,193,184. 12
An increase of 177,380. 61 acres	
Appropriated States as swamp	3,757,888. 99
An increase of 5,000,000. 01 acres	
Entries in the roads	1,157,375. 01
An increase of 871,140. 66 acres	
Entries in irrigation roads	19,455. 14
Entries in railroads, survey roads, etc.	1,220. 00
An increase of 320 acres	
Total land disposed of in 1881-82	96,522. 00
An increase of 57,700 acres	
Sum of all entries	435,189. 99
An increase of 306,350. 66	
Subtract entries in roads	223,184. 99
Subtract entries in irrigation roads	1,220. 00
Subtract entries in railroads, survey roads, etc.	1,334. 47
Subtract entries in roads	1,334. 47
Sum of all sales	4,032. 45
Subtract State taxes	3,981. 36
Subtract State taxes	1,781. 10
Subtract State taxes	1,514. 27
Subtract State taxes	450. 00
Subtract State taxes	10,905. 75
Subtract State taxes	

	Acres.
Scrip locations under the acts of June 2, 1858, and June 22, 1860.....	195,516.92
An increase of 107,943.48 acres.	
Donation claims.....	36,552.50
Under settler's relief act of March 3, 1875.....	160.00
Total	14,792,371.65

A quantity greater by 5,458,988.36 acres than that disposed of the preceding year.
The cash receipts were \$2,290,161.60, an increase of \$407,048.04.

During the fiscal year 15,699,253 acres of public lands were surveyed, and 652,151.37 acres of private land claims, an increase of 7,253,471 acres. The total area of public lands surveyed up to 30th June last is 752,557,195 acres, leaving still unsurveyed an estimated area of 1,062,231,729 acres.

PUBLIC LANDS COMMISSION.

The Public Lands Commission, appointed in conformity with the act of March 3, 1879, and consisting of the Commissioner of the General Land Office, the Director of the Geological Survey, and Messrs. John A. Powell, A. T. Britton, and Thomas Donaldson, was duly organized on July 8, 1879, and submitted to me on the 24th of February, 1880, its preliminary report, which I had the honor to transmit to you on the 24th of February, 1880, for submission to Congress.

In compliance with the provisions of the law, the work was subdivided into two principal parts—first, the codification of the present laws relating to the survey and disposition of the public domain; and, second, investigation of the whole subject, with a view to recommend new legislation.

The preliminary report above referred to contains a carefully-prepared bill providing for the survey and disposal of the public lands of the United States.

Before preparing the bill the commission distributed a circular letter making inquiries of various intelligent persons throughout the States and Territories as to what legislation might be required regarding the disposal of the public domain.

This circular letter contained, among many others, inquiries in regard to rainfall, irrigation, water rights, the area of pasturage, timber, and mineral lands; also as to the climatic conditions in various localities, and so on. The commission visited all the Western States and Territories, and as much as possible personally informed themselves upon these various topics on the ground.

The proposed legislation as embodied in the bill accompanying the report is predicated upon the information elicited by the circular, as well as personal inspection and investigation.

The importance of the passage of this or some similar bill by Congress cannot be overestimated. Existing laws for the survey and disposal of the public domain, were enacted mainly while the government was disposing of public lands east of the Missouri River. The climate, soil,

and products of the lands west of the 100th meridian are so entirely different from those east of it, as to require legislation specifically applying thereto. This whole subject is so fully discussed by the commission, and by the persons answering their circular letters of inquiry, which has been before reported to Congress, that I deem no further reference to that subject necessary in my report.

The codification by the commission of nearly three thousand acts of Congress which had been enacted since the beginning of the public land system has been a work of very great and painstaking professional labor, and will be submitted to Congress by the 1st of January next. The work will be comprised in three volumes of several hundred pages each. These will contain a statistical history of the public land system, a codification of the existing laws, general and permanent in their character, and a compilation in chronological order, State by State, of all local and temporary legislation affecting the titles therein. To these will be attached a table of cited cases referring to the construction these laws have received by judicial and executive authorities. Easy reference in compact form will thus be accessible with regard to laws and decisions applicable to the country at large, as well as to those upon which the titles in each State may severally depend. An analysis of the military reservations in the United States, an index to all Indian treaties, and much other valuable information not heretofore compiled, will also be presented.

Early action upon the bill drafted by the Public Lands Commission and submitted to Congress at its last session is urgently demanded by the public interests as the settlement of our Western Territories progresses, and I beg that the attention of Congress be invited to that important subject.

PRIVATE LAND CLAIMS.

Sections 206 to 219, inclusive, of a bill reported by the public lands commission, and printed as House bill No. 4805, now pending before Congress, are liberal translations of a bill introduced in the Senate during the present Congress by Hon. George F. Edmunds. This bill provides for settlement of private land claims in all the territory derived from Mexico, except in California.

The present basis for the settlement of these claims is the 8th section of the act of July 22, 1884, which makes it the duty of the surveyors general to report the origin, nature, and extent of all claims to lands, under the laws, usages, and customs of Spain and Mexico, and to report his conclusions to Congress for its direct action upon the question of confirmation or rejection.

The law is singularly defective in the machinery for its administration, and imposes no limitation of time for the presentation of claims, and no penalty for failure to present them. Its operation has been a failure, according to a series of statistics made to claimants and to the United States.

After a lapse of nearly thirty years, more than one thousand claims have been filed with the surveyors-general, of which less than 150 have been reported to Congress, and of the number so reported Congress has finally acted upon only 71. The construction of railroads through New Mexico and Arizona, and the consequent influx of population in those Territories, renders it imperatively necessary that these claims should be finally settled with the least possible delay. I have, therefore, the honor to recommend that the attention of Congress be called especially to this subject, with a view to securing action upon the claims pending before it, and upon the pending bill providing for the settlement of the remaining claims.

REDWOOD AND BIG TREES.

In my last annual report I called attention to the fact that the waste and destruction of the redwood and the "big trees" of California have been and continue to be so great as to cause apprehension that in the course of years these magnificent species may entirely disappear unless some measure be taken to preserve at least a portion of them. I recommended at the same time that the President be authorized to withdraw from sale or other disposition an area at least equal to two townships in the coast range in the northern and an equal area in the southern part of the State of California upon which these interesting trees grow. That bill has not yet been acted upon, and it seems important that if any measure for the preservation of these species of trees is to be taken at all, it should be done as soon as possible. I therefore once more commend this subject to the attention of Congress.

TIMBER-LANDS.

In my first annual report I had the honor to present to you in 1877, and every successive year thereafter, I invited attention to the extensive depredations committed on the timber-lands of the United States, and the rapid and indiscriminate destruction of our forests, especially in the South and in the States and Territories of the West. Referring to the warning example furnished by other parts of the world, where the disappearance of the forests had been followed by the most deplorable consequences: the drying up of springs; the irregularity of the water-supply in navigable rivers; the frequency of destructive freshets and inundations; the transformation of once productive and flourishing agricultural districts into barren wastes, almost uninhabitable to man—I showed that the same results would inevitably befall certain parts of this country, if so short-sighted and reckless a practice be persisted in as is now prevailing. I set forth as a universally acknowledged fact that especially in our mountainous regions the stripping of the slopes of their timber would be an irreparable injury, inasmuch as the rainfall and the water from melting snows would wash down the soil, transform brooks and rivulets running regularly while the forests stand, into raging torrents

at certain seasons, and sweeping masses of gravel and loose rock into the valleys below, apt to render them incapable of cultivation, while on the mountain sides the forests once destroyed would in most cases never grow up again. Measures instituted at the beginning of this administration to discourage and lessen such evil practices by bringing large depredators to punishment and seizing quantities of timber taken from the public lands for mercantile purposes, were at first received with wide-spread discontent and opposition.

Gradually the wisdom of the policy which dictated such measures began to be recognized even in many of the districts where the operations of this department had taken place. In every one of my reports I urged this important subject upon the attention of Congress and the country, and now it may be observed that there is scarcely a responsible journal in the United States that has not during the last two years from time to time published articles on the injury inflicted upon the country by rapid and indiscriminate destruction of its forests and the necessity of preserving a fair proportion of them. Many letters from the Western States and Territories are coming to this department, urgently asking that existing evils in this respect be remedied by proper changes in the laws. While this wholesome sentiment upon this important question is rapidly growing up, I regret to say that in spite of the repeated recommendation of the passage of a law to facilitate the prevention of the wasteful devastation of the public timber-lands, and to enable the government to dispose of timber to settlers and miners, as well as for legitimate mercantile purposes under such regulations as would prevent the indiscriminate and permanent destruction of our forests, almost all the legislation that has been had upon this subject consisted in acts relieving those who had committed depredations in the past of their responsibility, and protecting them against the legal consequences of their trespasses. Such laws authorizing the composition of past offenses, might not have appeared objectionable in themselves had they been accompanied by other legislation regulating the cutting of timber on the public lands or the selling of timber from them in such a manner as to render possible at the same time the preservation of such a proportion of the forests as appears necessary for the public good; but without such additional provisions they constituted only an encouragement to trespassers, inasmuch as they were apt to encourage the hope that at a future time similar acts condoning their offenses would be passed. In the absence of the desired legislation nothing remained to this department but to make every possible effort even under such discouraging circumstances, at least to limit the extent of the work of lawless and dangerous destruction, as far as it could be done by executive action with the small means at our disposal.

When I took charge of the Interior Department the only regulation with regard to this subject then in force consisted in a general circular issued on the 24th of December, 1855, by the then Commissioner of the

General Land Office. In this circular the Commissioner referred to the various opinions of Attorney-Generals construing the act of March 2, 1831, entitled "An act to punish offenses committed in cutting, destroying or removing live-oak and other timber or trees reserved for naval purposes"; and also the decision of the Supreme Court of the United States in the case of the United States *vs.* Ephraim Briggs (9 Howard, page 3, 1851), in which the Supreme Court decided that the said act authorized the prosecution and punishment of all trespassers on the public lands for cutting timber whether such timber was fit for naval purposes or not. This circular was addressed to the registers and receivers of local land offices throughout the United States charging them with the duty of investigating depredations and prosecuting trespassers; but it was found that the sums recovered in accordance with this circular were very small compared with the damages committed by trespassers upon the public lands during the period intervening between the publication of the circular and the incoming of this administration, and that the evil had grown rather than diminished in extent.

The present Commissioner of the General Land Office having submitted to me a report upon this subject, I addressed to him, on the 5th day of April, 1877, a letter expressing the opinion that the system theretofore adopted had failed to accomplish the desired purpose; that the interest of the government demanded an entire change in the mode of procedure, and that more effective measures should be adopted to compel an observance of the law, in order that the public lands might be protected from waste and spoliation. I further directed that agents should be employed for this purpose by the Commissioner of the General Land Office to be borne on his rolls as clerks or employés, and to be detailed for special duty to act under his instructions in ascertaining when, where, and by whom depredations had been committed on the public lands, and to report the facts in each case. Secondly, that if upon examination of the reports so obtained the facts elicited in any case were found to warrant the institution of legal proceedings to punish the trespassers, or to collect damages for the waste already committed, or both, report should be made to this department with the opinion of the Commissioner thereon, in order that such further proceedings might be had in the premises as the case required. Thirdly, that no agent so employed should be permitted to make any compromise for depredations on the public lands, but if any propositions for settlement were submitted to them, the agents were to be instructed to report the same to the Commissioner of the General Land Office, with a full statement of the facts in the case, showing the nature and extent of said depredations, when and by whom committed, the quantity and value of the timber, when cut, and the value of the land in its present and former condition, all of which, together with the opinion of the Commissioner thereon, was to be transmitted to this department for further consideration. Fourthly, that if in any case the emergencies should seem to require more prompt action than contemplated in the

above directions in order to arrest the offender or to secure the government for the damages suffered, the agents were instructed to apply to the United States district attorney for the district in which the waste was committed to institute the proper legal proceedings for that purpose, which course, however, should be taken only in cases where the evidence was clear and indisputable. This letter has since formed the basis of all action of this department, having in view the prevention of trespasses upon the timber of the public lands and the collection of the value of the timber cut and the prosecution of the offender.

The appropriations for keeping these special agents in the field were very limited; for the year ending June 30, 1877, \$12,500; for the year ending June 30, 1879, \$25,000; and for the year ending June 30, 1880, \$40,000; making a total down to June 30, 1880, of \$77,500 since the inauguration of the present policy. Considered from the standpoint of a mere financial transaction, the operations of the department have been very successful. During the twenty-two years from December 24, 1855, to the 5th of April, 1877, while all action as to timber depredations took place under the circular of 1855 first mentioned, the sums recovered and turned into the Treasury amounted in gross to \$248,795.68. During three years and three months from April 5, 1877, to the 30th of June, 1880, the proceeds from the same source amounted to \$242,376.68 actually collected. It must be considered, however, that the amount for which judgment has been obtained—but not yet collected—is about as much more. The proceeds of the last three years and a half have therefore been much larger than those of the twenty-two years preceding.

The net money thus realized, however, forms no considerable and certainly not the most important part of the benefits derived from the appropriations made by Congress for that purpose. The repression and prevention of depredations on the public timber-lands on the Atlantic, Pacific, and Gulf coasts constitutes the chief and most beneficial result. At the time of the inauguration of the present system the export trade in timber had grown to enormous proportions on those coasts. Whole fleets of vessels entered the harbors of Puget Sound, the Columbia River, Pensacola, Sabine Pass, Atchafalaya, and places along the shore, whose cargoes consisted mainly of timber taken from the public lands, for which no compensation was paid to the government, and which was not used for the domestic or mining purposes of our own people, but for export to foreign countries. If this trade has not been entirely arrested, it has at least been very materially diminished. From the best sources of information at my command, I am able to report that little if any timber unlawfully taken from the public lands is now being shipped to foreign countries. While it was not the policy to interfere with the necessary use of timber by the settler or miner for domestic use or purposes immediately connected with mining business, it was thought but just to the people of the United States that extensive trading in stolen timber by large firms, and espe-

cially the exporting to foreign countries of timber unlawfully taken from the government lands to the detriment of the public interest, should be effectually arrested. Whatever our success in this respect may have been so far, it is certain that the evil will spring up again if the efforts of the government to arrest it should be in the least relaxed in the future, or if Congress should fail, by leaving the laws of the country in their present condition, to show an active sympathy with this policy. To that want of proper legislation I have each successive year called attention in my reports to you, as well as by direct appeals to Congress. The main features of the legislation urged by this department are very simple. They consist in two propositions: First, that the government should be authorized to sell timber from lands principally valuable for the timber growing upon them—that is to say, not agricultural nor mineral—at reasonable, perhaps even at merely nominal, rates to supply all domestic needs and all the wants of local business enterprise, as well as of commerce, the latter so far as compatible with the public interest; and, secondly, that these sales of timber be so regulated as to preserve the necessary proportion of the forests on the public lands from waste and indiscriminate destruction. Such a policy can, in my opinion, be carried out without great cost, with a simple machinery, and in perfect justice to the wants of settlers and the business enterprises of the country. It is virtually the policy proposed to Congress by the Public Lands Commission in the report and the bill submitted to Congress at its last session.

I would also urge once more upon Congress the importance of the passage of a law, repeatedly recommended in my reports, prescribing a severe penalty for the willful, negligent, or careless setting of fires upon public timber-lands of the United States, and also providing for the recovery of damages thereby sustained. The extensive as well as wanton destruction of the timber upon public lands, by the willful, or negligent and careless setting of fires by hunters or prospectors or tourists, is a matter of general notoriety. The destruction caused in this way from year to year is almost beyond calculation. While in several, if not in all of the States, such acts are made penal offenses by statute, no law of the United States provides specifically for their punishment when committed upon the public lands. If forest-fires in the Western States and Territories cannot be wholly prevented by such a law, the punishment of some offenders here and there will certainly make the class of persons most liable to commit such offenses more careful, and thereby at least limit the extent of the immense damage now caused by negligence or recklessness.

The question of the preservation of forests in just proportion to the area of the country is engaging the attention of prudent men in every civilized nation. By competent authorities it is estimated that this proportion should be about one-fourth of the whole. In some foreign countries the injury caused by the barbarous ignorance and improvidence of

past times has become already too great to be repaired, and the evil consequences are keenly felt. In the United States the consumption of timber is enormous and rapidly increasing. It is in the nature of things that where timber is taken from the public lands without restraint the process is attended with the most reckless waste. No attention is paid to the preservation of young trees or of anything that is not immediately used. What is looked upon as everybody's property is apt to be in nobody's care. Thus, our forests are disappearing with appalling rapidity, especially in those parts of the country where they will not renew themselves when once indiscriminately destroyed. Like spend-thrifts, we are living not upon the interest but upon the capital. The consequences can easily be foreseen. They will inevitably be disastrous, unless the Congress of the United States soon wakes up to the greatness of the danger and puts this ruinous business upon a different footing by proper legislation, either according to the principles advocated by this department and the Public Lands Commission, or upon others that may be found equally effective. The action of the government will apply only to the public lands; but those portions of the country in which the great body of the public lands is situated stands most in need of speedy and energetic action. I have considered it my duty to call attention to this subject upon every proper occasion, and that duty has been performed. All further responsibility will rest with the legislative branch of the government. It is to be hoped that the voice of warning will be heeded before it is too late.

BUREAU OF RAILROAD ACCOUNTS.

The report of the Auditor of Railroad Accounts, herewith presented, gives the operations of his office during the year ending June 30, 1880, under the law relating to indebted Pacific railroad companies and certain land-grant railroads.

The Auditor and railroad engineer made two inspections of railroad property—one during the months of August and September, 1880, the detailed results of which are embodied in his report. About 6,655 miles of railroads, coming under the operations of the bureau, have been inspected.

The Auditor reports a gratifying improvement in the condition of railroad property, more especially in that of the Union and Central Pacific Companies. The largely increased earnings of the companies have enabled them to maintain and improve their property to a much greater extent than heretofore.

Among the properties included in the inspections, aside from the Union Pacific and Central Pacific, were those of the Southern Pacific, Atlantic and Pacific, and Northern Pacific Companies, in all of which the government is more or less interested, either as creditor or otherwise. They are all making increased earnings, although rates both for freight and passengers have been reduced, and it is believed that as the country

west of the Missouri River fills up there will be remunerative business enough for each one of them.

Particular attention is invited to the remarks of Mr. Nichols, the railroad engineer, in regard to the important subject of railroad accidents and their prevention, and the statistics furnished relative thereto.

As to the large increase of business on the railroads of the United States, the Auditor remarks that it has been mainly on the railroads of the Middle, Western, and Southwestern States, business on the railroads of the New England and Southern States not having materially increased. A comparative statement of the business of many principal lines east and west of the Mississippi River is also submitted.

The passenger traffic on the Union Pacific, Central Pacific, and Kansas Pacific Railroads reached its maximum in 1875, since which time it has greatly decreased, while the earnings for freight have continued to grow.

The business of the Sioux City and Pacific and Central Branch Union Pacific Railroads has increased to such an extent that an annual payment can be made hereafter by those companies on account of "5 per cent. of net earnings," to be applied in liquidation of their debt due the United States.

Attention is called to the fact that many of the roads included in the act creating the bureau have neglected to furnish the reports called for; and it is suggested that patents for lands be refused to such companies as do not comply with the law.

The total amount of the "five per centum of net earnings" of the subsidized Pacific Railroads to December 31, 1879, has reached the sum of \$5,355,150.08, being an increase since last report of \$638,884.85, while the debt of the same companies for bonds issued is as follows:

Total debt, principal and interest, to June 30, 1880	\$112,213,373 30
Total credits, transportation and money in Treasury, June 30, 1880... .	15,385,261 13
Balance due the United States	96,828,112 17

The Auditor gives detailed statements in regard to the sinking funds of the Union Pacific and Central Pacific Companies, showing the character and amount of investments; and, in view of the many difficulties attending a fair and equitable investment of these moneys, suggests that amounts covered into the sinking funds be credited, with interest at 6 per cent. per annum, payable semi-annually. The Auditor also calls attention to the delay in the settlement of the companies' accounts for transportation, the balance of unsettled accounts being so large as to be a serious loss to the companies in the matter of interest.

The Auditor publishes in his report departmental circulars affecting Pacific and other railroads, laws of the United States affecting railroads and telegraphs, and recent decisions of the Supreme Court relating to the same subjects.

Under the recent decision of the Supreme Court of the United States

in the case of *Thomas vs. West Jersey Railroad Company*, any unauthorized lease entered into by railroad companies must be canceled.

Another important decision is that of the Court of Claims, No. 11471, in the case of *The Atchison, Topeka and Santa Fé Railroad Company vs. The United States*, in which the court holds that 50 per cent. of its gross earnings is a fair compensation to the company for the actual cost of transportation and such part of the profits upon transportation as are earned by the company from the government.

Particular attention is called to the circular of the Treasury Department dated November 29, 1879, giving notice to all government officers and employés that *no money payments for transportation* can be made to Pacific Railroads which have been subsidized with bonds.

On January 26, 1880, articles of consolidation were filed in this department in accordance with law, in which the Union Pacific Railroad Company, the Kansas Pacific Railway Company, and the Denver Pacific Railway and Telegraph Company are consolidated under the name of "The Union Pacific Railway Company."

THE UNION PACIFIC RAILWAY COMPANY.

The property and business of the Union Pacific Railway Company is reported on in full, and has been found in good condition, with business increasing. Under the sinking-fund act of May 7, 1878, the "25 per cent. of net earnings" found due the United States by the company amounts to \$1,532,916.12.

The Union Pacific Railway Company furnishes reports from which the following statements are derived:

Length of line subsidized with bonds.....	1,432,62
Length of line subsidized with lands.....	1,783,17
Leased to Central Pacific.....	5,
Operated by Union Pacific.....	1,809,84
Stock subscribed	\$50,762,300 00
Stock issued	50,762,300 00
Par value	100 00
United States subsidy bonds.....	33,539,512 00
Other funded debt.....	82,434,357 62
 Total stock and debt.....	 <u>166,736,169 62</u>
 Floating debt and interest account to June 30, 1880, on subsidy and other bonds.....	 \$26,429,551 57
Bonds and stock of, and investments, in other companies.....	15,338,453 94
 Material on hand.....	 \$1,850,669 82
Cash on hand	2,047,329 79
Accounts receivable	6,743,919 01
 Cost of road and equipment and Missouri River bridge, per compa- ny's books.....	 <u>10,641,918 62</u>
	 \$156,562,643 29

The following statement shows the earnings of the Union Pacific Railroad Company prior to consolidation, for seven months ending January 31, 1880:

Passenger.....	\$1,867,055 36
Freight	5,789,268 18
Miscellaneous	624,237 78

Operating expenses.....	8,280,561 32
	3,048,029 14

Net earnings.....	5,232,532 18

Since the consolidation the Union Pacific Railway Company has had earnings to June 30, 1880, as follows:

Passenger	\$2,579,188 57
Freight	5,644,933 73
Miscellaneous	751,884 80

Total for 5 months.....	8,976,007 10
Operating expenses.....	4,312,500 15

Net earnings.....	4,663,506 95

Interest paid.....	\$3,390,595 36
Dividends paid.....	2,489,134 50
Acres of land unsold.....	15,933 007.28

Under the act of May 7, 1878, the earnings for the year ending December 31, 1879, have been as follows:

Ordinary net earnings.....	\$7,768,224 47
Less interest on first-mortgage bonds.....	1,636,559 99

Net earnings under the law.....	6,131,664 48

One-half transportation, applied to interest	\$574,844 01
One-half transportation, applied to sinking fund.....	574,844 00
Five per cent. under acts of 1862 and 1864, applied to interest	306,583 22
Additional payment under act May 7, 1878, for sinking fund	76,644 89

Total, 25 p.r cent. of net earnings to December 31, 1879.....	1,532,916 12

CENTRAL PACIFIC RAILROAD COMPANY.

The property of this road is referred to in detail by the railroad engineer, and is in good condition and well maintained. The company has opened a new and shorter route from Sacramento to San Francisco, via Benicia, over which the bulk of the overland traffic is now done. In view of the fact that this is not a subsidized road, and that the debt due to the United States by this company is still quite large, the Auditor questions whether two or three hours quicker transportation of the mails is more to be considered than the retention of a greater or less proportion of compensation, for carrying the mails, to be applied on the

debt. When the junction of the lines of this company from Goshen is effected with those of the Atchison, Topeka and Santa F^e Company in New Mexico, the diverted traffic will doubtless considerably reduce the amount to be applied on the debt due the government by both the Union and the Central Pacific Railroad Companies.

The company is making many important improvements in their property—new car-shops and other buildings at Ogden; new passenger and freight depots at Sacramento; extensive renewals in the snow galleries; and a costly permanent embankment for a wharf and tracks at Oakland, instead of the present pile and trestle work.

This company also leases and operates 550 miles of the Southern Pacific Railroad.

Under the sinking-fund act of May 7, 1878, the "25 per cent. of net earnings" found due the United States by this company to December 31, 1879, amounted to \$899,563.92.

The following statements are taken from reports furnished by the company:

The number of miles subsidized is	860.66
The number of miles owned is	1,204.50
The average number of miles operated during the calender year of 1879 was	2,316
Locomotives owned, 226; leased, 48; total.....	274
Passenger cars owned, 261; leased, 37; total.....	298
Baggage, mail, and express cars owned, 56; leased, 12; total	68
Freight and other cars owned, 5,311; leased, 894; total.....	6,205
Stock subscribed	\$62,608,800 00
Par value of shares	100 00
Stock issued	59,275,500 00
Increase of stock during the year	5,000,000 00
Subsidy bonds outstanding	\$27,855,680 00
Funded debt	56,830,000 00
Floating debt	5,640,685 00
Interest due and accrued on funded debt	1,484,345 00
Balance of interest due and accrued on United States bonds	20,106,761 81
Total debt	111,917,491 81
Total stock and debt	\$171,192,991 81
Cost of road proper	\$136,558,752 45
Equipment	8,045,262 10
Real estate	2,560,396 81
Total cost of road and equipment, &c	147,164,411 36
Cash, materials, and sinking funds	\$7,975,230 72
Bonds and stocks	773,500 30
Miscellaneous investments	1,560,432 10

For year ending June 30, 1880:

Passenger earnings.....	\$5,235,573 62
Freight earnings.....	10,900,932 47
United States mail.....	488,610 32
Miscellaneous earnings.....	1,177,331 75
 Total.....	17,802,448 16
Operating expenses and rentals	11,618,830 55
 Ordinary net earnings	6,183,617 61
 Interest paid.....	\$3,781,825 96
Dividends paid.....	\$1,628,265 00
Acres of land unsold.....	10,995,865 46

CENTRAL BRANCH UNION PACIFIC RAILROAD.

Since the Auditor's last report, important changes have occurred in the affairs of the company owning this road. The engineer reports its property in good condition, with large additions to the equipment during the year. This road, with the leased lines controlled by it, is now operated by the Missouri Pacific Railway Company.

From reports made, the following statements are derived:

Miles owned and subsidized.....	100
Miles leased.....	158
Stock issued	\$1,000,000 00
Subsidy bonds.....	1,600,000 00
Funded debt	2,225,218 14
Floating debt	569,630 45
Interest on funded and floating debt.....	5,921 87
Interest on subsidy bonds.....	1,207,259 66
 Total debt.....	5,601,418 76
 Stock and debt.....	\$6,601,418 76
Cost of road and equipment.....	3,962,974 75
 Passenger earnings for year ending June 30, 1880.....	\$208,866 26
Freight earnings	754,757 75
Miscellaneous earnings.....	54,260 38
 Total	1,107,884 39
Operating expenses.....	774,384 22
 Net earnings.....	333,500 17

KANSAS PACIFIC RAILWAY.

The Kansas Pacific Railway Company was consolidated with the Union Pacific Railroad Company, January 26, 1880. This report is therefore for the seven months ending January 30, 1880:

Miles operated.....	1,006.3
Miles owned.....	778.5
Miles subsidized with lands.....	638.5

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Miles subsidized with bonds	394
Number of locomotives	105
Passenger cars	54
Baggage, mail, and express cars	23
Caboose cars	42
Freight and other cars	1,691
Stock subscribed	\$9,992,500 00
Par value of shares	50 00
Stock issued	9,689,950 00
Subsidy bonds	6,303,000 00
Funded debt	24,373,225 12
Floating debt	1,961,197 62
Interest on funded and floating debt	1,090,450 00
Interest on subsidized bonds	3,723,553 17
 Total debt	 <u>37,452,025 91</u>
 Stock and debt	 <u>847,141,975 91</u>
Cost of road and equipment	<u>34,359,540 66</u>
 Passenger earnings for seven months ending January 30, 1880	 8690,669 71
Freight earnings	2,300,625 01
Miscellaneous earnings	155,139 25
 Total	 3,146,433 97
Operating expenses	1,841,571 38
 Net earnings	 <u>1,304,862 59</u>
 Interest paid	 27,175 89
* Acres of land unsold	4,566,046 68

SIOUX CITY AND PACIFIC RAILROAD.

The reports of this company show length of road operated, 217.14 miles; road owned, 107.42; subsidized line, 101.77; number of locomotives, 13; number of passenger cars, 9; number of baggage, mail, and express cars, 6; number of freight and other cars, 233. Stock subscribed, \$2,068,400; stock issued, \$2,068,400; funded debt, \$1,628,000; United States subsidy bonds, \$1,628,320; floating debt, \$278,592.05; accrued interest on funded debt, \$51,165; accrued interest on United States subsidy bonds, \$1,171,199.87; total debt, \$4,757,276.92; stock and debt, \$6,825,676.92; cost of road, \$5,355,551.28. Passenger earnings for year ending June 30, 1880, \$130,193.17; freight earnings, \$392,513.73; miscellaneous earnings, \$21,136.58; total earnings, \$543,843.48; operating expenses, \$421,232.03; net earnings, \$122,611.45; interest paid, \$98,119.90.

TEXAS AND PACIFIC RAILWAY.

For the fiscal year ending June 30, 1880, the company reports: Miles of road owned and operated, 183.86; number of locomotives, 54; pas-

* Also reported in the number of acres reported as unsold, belonging to the Union Pacific Railway Company.

senger cars, 32; baggage, mail, and express, 11; freight and other cars, 1,060. Stock issued, \$8,653,500; par value, \$100. Funded debt, \$20,418,997.68; floating debt, \$398,621.43; unpaid interest, \$2,122,720; total debt, \$22,940,339.11; stock and debt, \$31,593,839.11. Cost of road, \$28,925,840.90. Passenger earnings, \$466,736.78; freight earnings, \$2,075,993.44; miscellaneous earnings, \$80,536.55; total earnings, \$2,623,266.77; operating expenses, \$1,542,899.44; net earnings, \$1,080,-367.33; interest paid, \$662,520. Lands unsold (granted by State of Texas), 4,755,862 acres.

SOUTHERN PACIFIC RAILROAD.

From reports made to the Auditor the following figures are obtained: Miles operated, 160.89; miles owned, 711.56; leased to Central Pacific, 550.67 miles; number of locomotives, 48; passenger cars, 77; baggage, mail, and express cars, 14; freight and other cars, 1,156. Stock subscribed, \$36,763,900; stock issued, \$36,763,900. Funded debt, \$28,872,000; floating debt, \$554,815.07; accrued interest on funded debt, \$219,450; total debt, \$29,426,815.07. Stock and debt, \$66,410,-165.07. Cash, material, and accounts due, \$703,872.11. Cost of road, \$62,307,813.98; cost of equipment, \$1,848,533.51; total cost of road and equipment, \$64,156,347.49. Passenger earnings, \$399,349.34; freight earnings, \$455,382.51; miscellaneous earnings and rent of road, \$1,680,-149.56; total earnings, \$2,534,881.41; operating expenses, including taxes and insurance, \$756,683.88; net earnings, \$1,778,197.53; interest paid, \$1,872,480.39. Lands unsold, 9,240,376 acres.

THE NORTHERN PACIFIC RAILROAD COMPANY.

The entire property of this company has been inspected by the engineer, and is in good condition. A detailed statement of his observations will be found in his report.

The company is constructing at Saint Paul a handsome building to be used as general operating offices, and as soon as the requirements of traffic demand, proposes to build an iron bridge across the Missouri River at Bismarck.

The Auditor calls particular attention to the character of the lands of this company, they being much above the average of those granted the other Pacific railroad companies.

Under the present management the general condition of the company has greatly improved, and vigorous measures have been adopted to push the work to a successful completion.

The following statement is taken from reports furnished by the company:

Average number of miles operated, 781; miles owned, 637.98; stock authorized, \$100,000,000; common stock issued, \$49,000,000; preferred stock issued, \$43,412,645.12; total stock issued, \$92,412,645.12. Number

of locomotives, 58; passenger-cars, 25; baggage, mail, and express, 12; freight and other cars, 1,671. Funded debt, \$3,881,834.41; floating debt, \$1,405,867.10; total debt, \$5,287,701.51; stock and debt, \$97,700,346.63. Cost of road, \$95,697,159.04; cost of equipment, \$1,243,531.05; cost of road and equipment, \$97,920,120.57. Passenger, freight, and miscellaneous earnings, \$2,230,577.37; operating expenses, \$1,409,422.62; net earnings, \$821,154.75. Acres of land unsold, 39,406,016.

THE ATLANTIC AND PACIFIC RAILROAD COMPANY AND SAINT LOUIS AND SAN FRANCISCO RAILWAY COMPANY.

The former company has been revitalized, and has begun the construction of its road west of Albuquerque, N. Mex.

Fifty miles of railroad are completed, and are reported ready for the examination of commissioners to be appointed by the President of the United States for that purpose. A portion of the original road is now owned and operated by the Saint Louis and San Francisco Railway Company. The property of that company is in fair condition. The net earnings for the fiscal year ending June 30, 1880, amounted to \$1,252,863.69, against \$575,734.77 for the corresponding period of 1879.

The company reports as follows:

Number of locomotives, 49; number of passenger cars, 10; baggage, mail, and express cars, 19; freight and other cars, 2,135. Stock issued, \$23,803.462; funded debt, \$16,771,286.96; floating debt, \$542,950.27; unpaid interest, \$220,513.50; total debt, \$17,534,750.73; stock and debt, \$41,338,212.73. Cost of road and franchises, \$36,143,950.32. Net earnings, \$1,252,863.69; interest paid, \$654,239.23. Acres of land unsold, 49,244,803.

OREGON AND CALIFORNIA RAILROAD.

From reports made by this company the following figures are given:

Number of miles operated, 197.36; number of locomotives, 14; passenger cars, 9; baggage, mail, and express, 6; freight and other cars, 306. Par value of shares, \$100; stock issued, \$20,000,000; funded debt, \$10,950,000; floating debt, \$918,602.52; total debt, \$11,868,602.52; total stock and debt, \$31,868,602.52; cost of road, \$4,873,369.96; cost of equipment, \$590,434.80; cost of road and equipment, \$5,463,804.76. Passenger earnings, \$192,183.75; freight earnings, \$247,009.63; miscellaneous earnings, \$66,439.06; total earnings, \$505,632.44; operating expenses, including taxes, \$383,579.16; net earnings, \$122,053.28.

WESTERN OREGON RAILROAD.

This company furnishes the following report:

Miles operated, 49.76; number of locomotives, 7; passenger cars, 4; baggage, mail, and express cars, 2; freight and other cars, 171. Par value of shares, \$100. Stock issued, \$10,001,000; funded debt, \$4,695,000; floating debt, \$16,088.16; total debt, \$4,711,088.16; total stock and

debt, \$14,712,088.16. Cost of road, \$1,202,866.42. Passenger earnings, \$34,895.20; freight earnings, \$72,822.86; miscellaneous earnings, \$5,410.48; total earnings, \$113,128.54; operating expenses, including taxes, \$114,584.80.

THE MISSOURI, KANSAS AND TEXAS RAILWAY.

The properties of this road have been inspected and found in good condition.

The business of the company is in a flourishing condition and is increasing rapidly. The net earnings of the company for the fiscal year ending June 30, 1880, amounted to \$2,158,324.40, being an increase of nearly 50 per cent. over the corresponding period for 1879, when they amounted to \$1,129,365.97.

THE ATCHISON, TOPEKA AND SANTA FÉ RAILROAD.

This road was examined in May, but owing to lack of facilities afforded the inspection was very unsatisfactory.

The business of the company is in a prosperous condition, the net earnings for the fiscal year ending June 30, 1880, amounting to \$1,588,806.05, against the sum of \$931,786.40 for the corresponding period of 1879.

APPENDIX, TABLES, &c.

The Auditor's report is accompanied by an appendix and tables, containing statements and compilations of facts relating to the Pacific and land-grant railroad companies, the laws affecting them, statements of their affairs, their receipts, expenditures, and operations, the accounts between the United States and the Pacific railroad companies, the condition of the respective land grants, and other matters of interest to railroad companies.

The recommendations of the Auditor as to future legislative enactments in regard to subsidized and land-grant railroads are respectfully submitted to the consideration of Congress.

UNITED STATES GEOLOGICAL SURVEY.

The first annual report of the director of the United States geological survey, which I have the honor herewith to submit, is of so unusual an interest that an abridgment of it cannot be undertaken without doing it an injustice. The various geological and geographical surveys and exploring expeditions, which for many years had been carrying on their work without unity of aim and direction, each one operating upon a plan of its own and not unfrequently overlapping and duplicating each other, were at last merged in an homogeneous organization by the act of March 3, 1879. For the first time in our history a geological exploration of the public domain has been organized upon a comprehensive

scale and a systematic basis. The report sets forth that in order to avoid possible conflicts of jurisdiction, the purpose for which the geological survey was organized under the law creating it, namely, the classification of public lands, and, secondly, the examination of the geological structure and the mineral resources of the public domain, were so construed as not to interfere with the business of the General Land Office, and not to extend the operations of the office over the whole area of the United States, but to confine them to the so-called public land States and Territories.

With regard to the classification of the public lands the report says: "The Public Lands Commission, created by Congress in the same law which organized the geological survey, carefully examined into the question of classification and disposition of the public lands. In the deliberate opinion of that body it has been adjudged impracticable for the Geological Survey or any other branch of the Interior Department to execute a classification in advance of sale without seriously impeding the rapid settlement of the unoccupied lands. I have therefore concluded that the intention of Congress was to begin a rigid scientific classification of the lands of the national domain, not for purposes of aiding the machinery of the General Land Office by furnishing a basis of sale, but for the general information of the people of the country, and to produce a series of maps which should show those features upon which intelligent agriculturalists, miners, engineers, and timbermen might hereafter base their operations, and which would obviously be of the highest value for all students of the political economy and resources of the United States. Studies of this sort entirely aside from the administration of the land office can be made of the highest practical value, and to this end a careful beginning has been made."

As to the operations of the Geological Survey proper, the practice formerly followed of starting out campaign parties for the West in the spring, to return in the late autumn to Washington, has been abandoned. The Director of the Geological Survey divided the region west of the one hundred and first meridian into four large geological districts, with fixed headquarters. The first of these divisions is that of the Rocky Mountains, embracing within its boundaries Colorado, New Mexico, Wyoming, and Montana, and a small part of Dakota, an area inclosing the whole of the great Rocky Mountain chain. He placed at the head of that division, as geologist in charge, Mr. S. F. Emmons, with his main office at Denver, Col. The second division is that of the Colorado, embracing the remarkable plateau and canon country which lies between the Rocky Mountains and the Great Basin. At the head of this division he placed, as geologist in charge, Capt. C. E. Dutton, United States Ordnance Corps, with headquarters at Salt Lake City. The third division is that of the Great Basin, the tract of country bounded on the east by the Rocky Mountains and the Colorado plateau, and on the west by the country of the Sierra Nevada, Cascade, and Pacific Coast ranges, which lie between

it and the Pacific Ocean—a country of the highest importance from its abundant silver districts. To this district was assigned G. K. Gilbert, as geologist in charge, whose headquarters were, for convenience of access, also placed at Salt Lake City. The fourth division is that of the Pacific, and embraces the whole of Washington Territory, that part of Oregon which lies west of the Blue Mountains, and all of California except the desert region lying east of the Sierra Nevada and south of the 38th parallel. Mr. Arnold Hague, as geologist in charge, has his headquarters at San Francisco. The director states that "as soon as the work upon the cañons and plateaus of Colorado is done, it is intended to discontinue that division and to divide it on the line of the Colorado River between the divisions of the Rocky Mountains and that of the Great Basin.

The corps of the geological survey, as now organized, is divided into two classes: First, members of the regular and permanent corps, who are nominated by the director and appointed by the Secretary of the Interior, their appointments being made out and oaths of office being filled in the appointment office, Department of the Interior; second, temporary appointments, which the director is authorized to make and to revoke. Appointments to positions requiring scientific knowledge and practical experience are made only after a severe scrutiny of the qualifications of the applicant. Applicants for appointment under the division of general geology are required to furnish proper evidence of a good working knowledge of mathematics, physics, chemistry, geology, and mineralogy. Such evidence will consist of degrees of universities, or the testimony of experts in the required branches, or the result of a written examination. Applicants for appointment under the division of mining geology must furnish equivalent evidence of a working knowledge of mathematics, mechanics, mining geology, chemistry, metallurgy, and the mineralogy of economic mineral products. The corps consists of the director, eight geologists, five assistant geologists, one chief topographer, four topographers, two assistant topographers, one chemist, one photographer, one chief disbursing clerk, one disbursing clerk, three clerks, two messengers, and two watchmen. The appropriation for the fiscal year ending June 30, 1880, was \$100,000, and the amount expended from this appropriation for the fiscal year ending June 30, 1880, was \$79,375.57, and the amount remaining unexpended June 30, 1880, but required to meet outstanding liabilities, \$20,624.43.

There are among the members of the geological survey men of established and recognized eminence in their profession. With the approval of the Secretary of the Interior the geological survey was entrusted by the superintendent of the census with the collection of statistics of the precious metals, iron, coal, petroleum, copper, lead, quicksilver, and zinc, for the census. In order to conform to the requirements of laws governing the census and the survey, the geological director and several of the

corps of geologists have been constituted special agents of the census without pay from the census appropriation, and, in addition to this small staff experts, duly appointed by the superintendent of the census, have been detailed from the census bureau and ordered to report to the geological director. By this combination of forces of the census with the survey, the director will furnish the census bureau and Congress with a thorough exposition of the production of metals, coal, and petroleum, and the most important branches of the mineral industry. In this combined labor care has been exercised that only census employés should be detailed to work in the region east of the one-hundredth meridian. The work of gathering the statistics proper is fast approaching completion.

The report of the Director contains preliminary statements of the several geologists, presenting highly interesting accounts of their operations in the field, their various investigations, and the methods followed in collecting statistics for the census. As to the forthcoming publications, giving the results of these labors, the Director remarks: "The organization of the survey immediately followed the date at which the first appropriation of one hundred thousand dollars became legally available, and, as that fell in midsummer, only half the ordinary time which the seasons permit was left for field operations. At the close of the present summer, therefore, the scientific staff will have labored only one and a half field seasons—a very short time to bring their special works to completion. Realizing very fully, however, the natural desire of Congress and the administration to see actual results and apply the test of a critical examination to the fruits of the new bureau, I have called upon the members of the corps for an energy and intensity of labor which should not be greatly prolonged, and which affords no measure of the rate of progress on small appropriations hereafter. The gentlemen of the corps have responded with such cheerfulness and enthusiasm that I am able to promise between the close of field work this autumn and the opening of next spring's campaign the completion of twelve volumes of practical and general geology and palaeontology."

The range of the investigations carried on by the geological survey is indicated by the subjects treated in the volumes promised. They are the following: "Geology and mining industry of Leadville, Col." by S. F. Emmons. "Geology of The Eureka mining district in Nevada," by Arnold Hague, geologist in charge. "The copper rocks of Lake Superior, and their continuation through Minnesota," by Prof. Rowland D. Irving. "The Comstock Mines," by Eliot Lord. "The Comstock Lode," by George F. Becker, geologist in charge. "The mechanical appliances used in mining and milling on the Comstock lode," by W. R. Eckart, chief engineer. "The coal of the United States," by Raphael Pumpelly, geologist in charge. "The iron in the United States," by Raphael Pumpelly. "The precious metals," by Clarence King, director. "Lesser metals and general mineral resources," by Raphael Pumpelly. "The Uinkaret Plateau," by Capt. C. E. Dutton, geologist in charge. "Lake Bonneville,"

by G. K. Gilbert, geologist in charge. "The Dinocerata, a monograph on an extinct order of ungulates," by Prof. O. C. Marsh, palaeontologist.

The act of March 3, 1879, providing for the organization of the Geological Survey contains the following clause: "For the expenses of the Geological Survey and the classification of the public lands and examining geological structure, mineral resources, and products of the national domain, to be expended under the direction of the Secretary of the Interior, one hundred thousand dollars." Careful not to extend the Geological Survey beyond these limits which Congress may have intended to impose upon its operations, the term "national domain" was, as above mentioned, construed to apply only to the public land States and Territories, although geological investigations in the States which no longer contain public lands are equally interesting and important to industry as well as science. In view of the uncertainty of the meaning of the term "national domain" the Appropriations Committee of the House of Representatives caused to be offered in the House of Representatives resolution No. 116 extending the field of the Geological Survey over the whole of the United States. That resolution was promptly passed in the House, but is still pending in the Senate. Not feeling warranted in anticipating the action of the Senate by practical operations outside of the public land States and Territories, but desirous of preparing for such work if Congress should grant authority for it, the Director of the Geological Survey has laid down in his report his plan of dividing that part of the United States east of the 102d meridian into divisions in which the work might severally be carried on to advantage. One division would embrace Maryland, Delaware, Pennsylvania, New Jersey, New York, and the New England States; the other West Virginia, Virginia, North and South Carolina, Georgia, Florida, Alabama, Tennessee, and Kentucky—the two together the great Appalachian system of mountains extending from New Brunswick to Alabama. The great basin of the Mississippi is also divided into two grand divisions: first the division of the North Mississippi, bounded west of the Mississippi and the south by a line including Missouri and Kansas to the intersection of the 39th parallel with the 102d meridian. East of the Mississippi River the Ohio forms the dividing line between the northern and southern districts.

I beg leave to call the especial attention of Congress to the remarks made by the Director on the important benefits which the extension of the Geological Survey over the whole area of the United States would confer upon the industrial interests of the American people. He sets forth that in the realm of mineral productions the only efforts made to acquire any positive knowledge have been the highly useful but feebly endowed work of the late mining commissioners, whose investigations were suffered to end for lack of appropriations; that to-day no one knows, with the slightest approach to accuracy, the status of the mining industry, either technically, as regards the progress and development making in methods, or statistically, as regards the sources, amounts, and valuation

of the various productions; that considering the extent of country over which our minerals occur, their wonderful variety, and yet unmeasured amounts, it cannot fail to be apparent that no private individual or power is competent to do what long since ought to have been done, namely, to sustain a thoroughly practical investigation and exposition of the mineral industry; that even the results of associated efforts, as in the instance of the "Iron and Steel Association," however valuable, must inevitably be fragmentary and imperfect, and that "the Federal Government alone can successfully prosecute the noble work of investigating and making known the natural mineral wealth of the country, current modes of mining and metallurgy, and the industrial statistics of production." Selecting the subject of iron as an example, he shows by an elaborate exposition how "hopeless it is to look to any other source than the government for this service." With regard to the question whether the government has any constitutional power to extend such investigations over the several States, it is urged that "from every analogy of past legislation, Congress has clearly assumed to possess the requisite authority;" that "if it can investigate agricultural industry and maintain a department to execute that branch of inquiry, it can investigate mineral industry; if it can make a coast and geodetic survey over the whole United States, it can make a geological survey." The cost of carrying on a geological survey covering the whole of the United States is estimated by the director at the same sum which is annually expended by the Coast and Geodetic Survey. The importance of the results of the collection and dissemination of such information as the geological survey would gather can scarcely be overestimated. Being now so fortunate as to have in the service of the government a corps of scientific men of signal ability and energy to undertake this important work, under a direction eminently capable to give system of action and harmony of purpose to their operations, there is but little doubt that the American people would willingly approve an expenditure small in proportion to the general benefit to be expected. I therefore earnestly commend the suggestions of the Director of the Geological Survey to the consideration of Congress.

PENSIONS.

Since the beginning of the present administration the organization of the pension service has undergone some important changes. Better methods of adjudication, involving more care in the examination of claims and a more perfect system of files and records, have been adopted. The most radical change was the consolidation of pension agencies, which took place in 1877, under the Executive order of May 7 of that year. The 58 agencies then in existence were reduced to 18, and new districts conforming to the change were created. The advisability of the consolidation was questioned at the time, but actual experience has proven its wisdom. Prompt payments, an improved system of accountability, uniformity of practice in disbursements, a more effective super-

vision by the Pension Office, greater convenience in handling reports and accounts, and the annual saving of \$142,000 on salary account alone are among the substantial results of the consolidation.

The total number of claims settled during the four years preceding June 30, 1880, was 74,179, an increase of 26,536 over the previous four years. On the 30th of June, 1876, the number of pensioners borne upon the rolls was 232,137, and the payments for the year which then closed amounted to \$28,351,599.69. On the 30th of June, 1880, the number was 250,802 and the payments \$57,240,540.14. The large increase, as shown between the two periods, is due to the fact that the payments of the last year include the arrears of pension allowed under act of March 3, 1879.

The Commissioner estimates that upwards of \$50,000,000 will be required to pay the pensions of the current year, and that a like amount will be needed for the year following.

The magnitude of the interests involved in this branch of the service can be understood by the presentation of these figures, and it needs no argument to prove that the adoption of the very best attainable system of adjudication is a necessity.

While the sacred obligations represented by these enormous sums of money should be promptly paid, and every honest pensioner receive his or her dues with as little delay as possible, the greatest precaution should be exercised on the part of the government to prevent the admission or payment of fraudulent claims. The present system of adjudication, based almost wholly upon *ex parte* testimony, is admittedly defective. Perjured witnesses appear as well on paper as honest ones, and where no official record corroborates the evidence given, deception is not only easy, but the temptation to practice it very strong. A change of method in this direction is, in my opinion, absolutely essential to prevent fraud. It is not necessary to wait until a perfect system is presented before authorizing a departure from the present one. The plan proposed by the Commissioner of Pensions and recommended by him in his annual reports since 1876 looks to the correction of existing evils. It is not claimed as perfect; it may have faults which only a practical test can determine, but the importance of the work it proposes to do, and the large interests which depend upon the character of this work, should commend it to the earnest consideration of Congress and insure for it a fair trial. I am convinced that it is much better than the present system, and that any faults which actual experience might develop in it could be easily corrected, either by additional legislation or by the exercise of administrative discretion.

The report of the Commissioner contains an interesting array of facts and figures. On the 30th of June last the pension list consisted of 133,212 Army invalids; 78,772 Army widows, minor children, &c.; 2,060 Navy invalids; 1,870 Navy widows, minor children, &c.; 10,138

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The annual pensions average \$103.34—an aggregate for all of \$25,917,906.60. Exclusive of the arrears, the payments for the year amounted to \$37,046,185.89, of which \$12,468,191.20 was accrued pension in the new cases.

The payment of arrears commenced in May, 1879. There was paid in May and June of that year \$3,933,386.63, and \$19,980,808.23 during the last fiscal year. The total amount paid out for pensions during the year was \$57,026,994.12.

The number of cases in which arrears of pension have been allowed up to November 1, the date of the report, is 43,917. The average in each case is \$560.15. These cases were settled from the beginning, so as to distribute them in equal proportions throughout the country, month by month, as the work progressed.

During the 19 years from June, 1861, to July, 1880, 412,459 Army and Navy claims for invalid pension were filed, and 278,488 claims in behalf of Army and Navy widows, minor children, and dependent relatives; 168,856 of the invalids and 193,494 of the other classes were placed on the pension-rolls. Under the acts of February 14, 1871, and March 9, 1878, granting pensions on account of service in the war of 1812, 34,339 survivors presented claims, and 40,020 widows: 25,470 of the survivors and 29,898 widows have been pensioned. There were, on the 30th of June, 282,597 unsettled claims for pension of the Army and Navy classes, and 17,749 claims for pension on account of service in the war of 1812, for bounty-land warrants and for increase of pension. There were allowed during the year 14,631 original pensions of the Army and Navy classes, a larger number than has been allowed in any year since 1871. Annexed to the report is a number of valuable statistical tables, which cannot be given in full, but one of them is worthy of particular mention, showing the number of pensioners borne upon the rolls at the end of each fiscal year from 1861 to 1880, and the amount of money paid out for pensions each year. The total amount for the twenty years is \$455,718,505.70.

The Commissioner refers to the new record of claims which has been in course of preparation for many months, and now approaching completion, which classifies the claimants by their proper military organization. These records when completed will comprise 176 volumes of 250 pages each, and contain a record of the claims on account of service in 2,268 regiments, 194 battalions, 706 independent companies, 708 batteries, and 46 staff corps.

The reorganization in November last of the office force engaged in settling the Army claims for service in the war of the rebellion, with re-

arrangement of the files to correspond, has been of great advantage to the service.

The report refers to the subject of Indian pensions, on account of service in three regiments of Indian home guards, raised in the Indian Territory. In 1879 the Commissioner detailed two special agents to visit the Territory and investigate the claims upon their merits. The investigation was successful and the claimants are about to be paid their dues; a large sum of accrued pension is due in each case, which, under the law, must be paid by check issued by the pension agent. The Commissioner says that there are no banks or other financial institutions in the Territory upon which the pensioners can depend to exchange at a reasonable rate current money for their pension checks, and the pensioners are in danger of being overreached and defrauded of their pensions by unscrupulous speculators and adventurers, who infest the Indian and border settlements, unless some precaution shall be taken for their protection, and he recommends legislation to authorize the accrued pension to be paid in installments not to exceed \$200 each, as a measure of protection.

There are about 2,450 pensioners residing at the various branches of the homes for disabled volunteer soldiers, whose pensions annually amount to about \$300,000, which have been paid to the treasurer of the home and disbursed under the direction of the managers, who claim that this course is justified by the law and necessary in order to secure proper discipline and good order among the inmates. The Commissioner is of opinion that the law does not provide for the payment of these pensions in this manner, and requests that the subject be brought to the attention of Congress, so that the duties of the Commissioner of Pensions and managers of the home in relation to these pensions be more clearly defined.

Legislation to authorize the payment of the pensions to the wives and children of insane or imprisoned invalid pensioners is recommended.

The report also recommends legislation to authorize the pensions of minor children to be commenced at the date of the last payment to the widow of the soldier in cases where she has remarried and concealed the fact, and continued to draw the pension.

It also recommends legislation to enable the Commissioner to dispose more equitably of claims for increase of pension than can now be done under the law, and providing for the review of unjust rates of pension which have been established under a mistake.

The report next deals with the subject of attorneys' fees. It calls attention to the fact that since the act of June 20, 1878, there is doubt whether the penal provisions of section 4785, Revised Statutes, can be enforced against attorneys, and recommends an amendment to dispose of the doubtful construction.

It also recommends legislation to protect the department and claim-

acts against disbarred attorneys, who continue to solicit and receive fees in cases wherein they are no longer recognized.

Referring to the operations of the office in the investigation of frauds, he presents a table showing that the expenses of the year were \$26,466.19; that there was saved directly to the government by the investigation \$451,775.65.

The Commissioner is of the opinion that the great number of frauds discovered year by year, when it is considered that their discovery by the office is in a large degree chargeable to accident, or to voluntary information, is quite conclusive evidence that but a small percentage of the frauds committed have been discovered.

The Commissioner is of opinion that the compensation of pension agents is too small, and recommends a revision of the law fixing their compensation and increasing it by extending to them the right to use the official penalty envelope in their official correspondence. He also recommends that an additional fee of twenty cents be paid them for their services in paying the arrears.

The report closes with a recommendation for an increase in the number of clerkships of the classes 1, 2, 3, and 4, and also for an increase in the salaries of chiefs of division, appeal clerk, chief clerk, deputy commissioner, and Commissioner.

PATENTS.

The report of the Commissioner of Patents shows an increase in the work of the office for the year ending June 30, 1880, over that of the previous year.

The number of applications for patents was 20,990, being 1,690 more than the previous year. The number of applications for design patents was 681; for the reissue of patents 598; number of caveats filed 2,680; number of applications for registration of trade marks 732; number of applications for registration of labels 479; number of disclaimers filed 11; number of appeals on the merits 781.

Number of patents granted, including reissues and designs, 13,649, being 1,178 more than the previous year. The number of trade-marks registered was 515; labels registered 307; patents withheld for non-payment of final fee 1,313; number of patents expired 3,364.

The total receipts of the office were \$730,547.12, being \$27,400.33 more than the previous year.

The expenditures for the year were \$538,926.43; the expenditures for the year ending June 30, 1879, were \$548,651.37, \$5,000 of this being for the repair of models damaged by fire and not chargeable to the current expenses of the office.

The current expenditures of the office were \$9,725.04 less than the year before. This gives a net gain in excess of receipts over expenditures of \$37,125.37. The total excess of receipts over expenditures is \$191,620.69.

The Commissioner makes several recommendations worthy of special attention. He calls special attention to the inadequacy of the rooms provided for the use of the office. He also calls attention to the great need of a system of digests of inventions. To carry out this suggestion would require special appropriation or an increase in the working force of the office, in order that a portion thereof might be detailed for that purpose.

The interests of the service, in his judgment, demand an additional force of clerks and examiners, and in submitting his estimates for the fiscal year ending July 1, 1882, he recommends an increase of one principal examiner, three first assistant examiners, three second assistants, and three third assistants beyond what was provided for in the appropriation bill for the present fiscal year. For the purpose of a better organization of the office he, in the same connection, recommends that there be created three chiefs of divisions at a salary of \$2,000 each, who shall take the place of an equal number of fourth-class clerks. He also recommended a small increase in the number of clerks, and that the salaries thereof be readjusted to correspond with the character of work performed. To do this an increase of about \$50,000 in the appropriation for salaries is required.

EDUCATION.

The Commissioner reports satisfactory results in the work of his bureau. During the year 87,304 documents, circulars, and letters were sent to correspondents at home and abroad. During the same period 19,654 were received by the office.

The office library contains about 12,000 volumes and 25,000 pamphlets.

Attention is called to the marked improvement in the methods of teaching, especially in rural schools, and the gratifying growth of public sentiment throughout the country in favor of our public school system.

The laudable efforts in the direction of industrial education are noticed, and the excellent work being done by colleges of agriculture and the mechanic arts is commented upon.

The Commissioner renews his recommendation for the passage by Congress of some act of financial aid which should be distributed at first on the basis of the percentage of illiterate persons to the total population, and, substantially, on the plan adopted by the trustees of the Peabody Fund.

He refers to the interesting information received respecting the efforts made to establish schools in Alaska. The Russo-Greek bishop sends word of his desire to co-operate, if any plan for public schools be adopted by the government. The schools at Sitka and Wrangel, especially the girls' boarding-school at the latter place, report good progress; the children are managed easily and learn readily.

Evidence increases that these natives need only to be instructed in letters, industry, and conduct to become useful members of the community. They will care for themselves, preserve the peace, and aid in the material development of their country. The Commissioner states that all efforts in their behalf at present are made under the most discouraging circumstances, there being no law for the protection of life or property, and no authority to organize schools. He appreciates the difficulties which beset the organization of any local government for Alaska; but from information received believes that if proper laws were passed by Congress, it would suffice to provide for their temporary execution by a governor, a judge, a superintendent of instruction, and a secretary of the Territory, who jointly should constitute a council of administration and be held to proper accountability.

The papers accompanying the Commissioner's report comprise abstracts of all State, Territorial, and city school reports published during the time covered thereby, and statistics collected by the office directly from 8,000 schools and institutions of learning of various grades and kinds.

TENTH CENSUS.

Since the last annual report of the department, the Tenth Census of the United States has been taken.

The provisions of the acts of March 3, 1879, and April 20, 1880, have been found very efficient in securing a prompt and exact enumeration of the people, while the various classes of vital, social, and industrial statistics, which are gathered in connection with the enumeration of inhabitants, have been very satisfactorily obtained through the special agencies which have for the first time been put in operation under the above-mentioned acts.

Much surprise has been created, and not a little unfavorable criticism excited in the newspaper press, by reported gains of population in certain States which were far in excess of what was anticipated from the known conditions of settlement and occupation in the regions concerned.

Wherever the face of the returns afforded good reasons for doubting the accuracy of the enumeration, an investigation under competent agents has been had, and in some instances a thorough re-enumeration has been ordered of the district or districts in question. Thus far these investigations have shown that the original enumeration was substantially correct, and that the apparent cause for complaint was largely due to defects in the census of 1870; arising partly from the disturbed state of society existing at that time, and partly from the insufficient and inappropriate agencies then in use, which have now been superseded by the more efficient agencies established by acts of Congress of the present and the past year. I am satisfied that the enumeration conducted during the present year has been more thorough and exact than any taken under the act of 1880 could be, and that no reason exists for distrusting its essential soundness. The letter of the Superintendent concerning

the census of South Carolina, with a report of the special agent sent to investigate the extraordinary gains of population in that State, will be found among the documents accompanying this report.

The Superintendent of Census anticipates being able to make a complete report of the operations of the census, so far as the enumeration of inhabitants is concerned, during the coming month of December. Out of nearly 31,500 enumeration districts formed for the purpose of this census, complete returns have been received from all but 7 small districts, in which unavoidable accidents, such as the loss of matter in the mails, deaths of enumerators, or the delinquency of individual officials, have thus far prevented the completion of the work, which, however, it is expected will be brought to a conclusion within the course of the next few days.

I am gratified to report that the expenditures of the census have been kept within the limits prescribed by the act of March 3, 1879; and it is believed that a sufficient amount remains out of the sums appropriated for this service to complete the compilation and tabulation of the numerous classes of statistics collected.

The exigencies of the service since the first of May have required a considerable clerical force to be maintained upon work at night.

It is the view of the Superintendent that the compilation and publication of the several classes of statistics should be pushed forward with the utmost expedition.

While the census will always remain of value for purposes of comparison with preceding periods, its first and greatest service is its immediate use not only for determining the distribution of political power, according to the provisions of the Constitution, but also for directing State and national legislation, and for guiding individual and social effort for the promotion of public interests, and for the amelioration of the condition of the criminal, afflicted, and dependent classes.

Every year and every month, therefore, which can be saved in the compilation and publication of the census statistics adds especially to their value.

The authority conferred by the eighteenth section for the appointment of special agents to collect the manufacturing statistics of cities and considerable towns has been made use of by this office to the extent of appointing such agents in 276 cities and towns, the total number of such agents appointed being 365. From 260 of these cities and towns full returns have been already received, and an examination of the schedules shows that the value of the manufacturing statistics of the present census has been vastly enhanced by the system thus adopted.

In the remaining sixteen, embracing the largest cities of the country, from which returns, on account of the great number of establishments to be canvassed, are not yet fully due, the work is, according to full and frequent advices received, progressing in the most satisfactory manner. All the returns within this department of the census will, it is believed,

be in possession of the office during December, when the compilation of the manufacturing statistics will be pushed rapidly forward.

The work of paying the enumerators for their services has been carried on with the utmost expedition which was consistent with justice to the census and to the Treasury.

It has been necessary to ascertain that each part of the enumerator's work has been properly done before he could safely be paid, and it has also been necessary to guard each statement and payment of account with all the checks which would have been necessary in case of much larger payments. The accounts of 28,410 enumerators have already been stated and settled, involving a total expenditure of \$1,820,027.34: of the remaining 2,855 cases the accounts of 1,242 have been stated, and vouchers have been mailed to the enumerators for their signatures. In 1,199 cases the accounts are now in course of adjustment. In 414 cases accounts have been suspended, owing to deficiencies or irregularities in returns, or to the failure of supervisors to make the required statements of time occupied or work done, or to the necessity of still further investigating matters connected with the enumeration. I have no reason to doubt that the present month will see all the enumerators paid for their services, except only in cases where a suspension is required for reasons which are unmistakably connected with some fault, more or less serious, on the part of the enumerator himself.

The total disbursements on account of the Tenth Census to December 1, 1880, are as follows:

Supervisors of census:	
Salaries.....	\$53,000 00
Clerk-hire and miscellaneous.....	54,801 12
	\$107,801 12
Enumerators	1,820,027 34
Special agents for the collection of the manufacturing statistics of individual cities:	
Salaries.....	\$39,607 93
Office rent and miscellaneous	3,825 66
	43,433 59
Special agents at large for the collection of industrial and social statistics:	
Salaries.....	\$82,435 82
Clerk-hire.....	48,777 40
Traveling expenses.....	55,733 01
Office rent and miscellaneous	16,903 66
	203,849 89
Census Office:	
Salaries.....	\$288,708 84
Rent and fuel	5,769 55
Furniture and fittings.....	25,942 09
Stationery	24,464 12
Printing and binding.....	63,310 33
Traveling expenses and miscellaneous.....	8,750 42
	416,945 35
Total	2,592,057 29

In but three cases has it been found necessary to use the authority conferred by the twenty-third section of the act of March 3, 1879, for the removal of supervisors and the appointment of their successors, and in neither of these cases were the causes requiring removal such as to reflect upon the personal or official integrity of the supervisor so removed.

Attention is respectfully invited to the remarks of the Superintendent of the Census on the necessity of promptness in the publication of the census reports, and also to his recommendation as to their publication by special contract. It appears highly desirable that this subject should have early consideration in Congress.

ENTOMOLOGICAL COMMISSION.

The United States Entomological Commission had a prolonged session immediately after the adjournment of Congress, and perfected plans for carrying to completion the work with which it is charged. As during the previous year, the labor was divided so that Professor Riley had charge of that part of the work in which the cotton planter is concerned, while Doctor Packard and Professor Thomas had charge of the work in the West, relating to the Rocky Mountain locust. Professor Thomas made an exploration of those parts of Dakota and British America which embrace some of the most important regions in the permanent breeding-grounds of the locust. Dr. Packard visited Wyoming and Utah, collecting information regarding the locust; and his assistant traveled over two months in different parts of Montana, ascending the Yellowstone River, crossing the country to Bozeman and Helena, and returning through Eastern Idaho. Other agents of the commission collected locust data in Utah. All this region, usually affording the most favorable breeding-grounds for the locust, was remarkably free from them this season, so that the commission believe that there is little likelihood of injury from locusts in the West in 1881.

The second report of the commission is now just ready for distribution, and treats very fully of the locust problem, especially as to the future prospects in the great Northwest, the best means of averting locust injury there, and preventing migrations therefrom into the more fertile States to the east and south; also how the government can best aid in obtaining beneficial results.

Professor Riley, with a corps of able assistants, has conducted the investigation of the cotton-worm, and the results of his work will doubtless tend to lessen the destruction of the cotton-plant.

In addition to the second report, the commission has issued three special bulletins during the year, one by Professor Riley, on the cotton-worm; one by Professor Thomas, on the chinch-bug; and one by Doctor Packard, on the Hessian-fly. They are illustrated summaries of all that is known of these injurious insects, and have been in such demand that Congress ordered extra editions of the two first mentioned, and all three are exhausted, so that further demands cannot be supplied. The third

of the various productions; that considering the extent of country over which our minerals occur, their wonderful variety, and yet unmeasured amounts, it cannot fail to be apparent that no private individual or power is competent to do what long since ought to have been done, namely, to sustain a thoroughly practical investigation and exposition of the mineral industry; that even the results of associated efforts, as in the instance of the "Iron and Steel Association," however valuable, must inevitably be fragmentary and imperfect, and that "the Federal Government alone can successfully prosecute the noble work of investigating and making known the natural mineral wealth of the country, current modes of mining and metallurgy, and the industrial statistics of production." Selecting the subject of iron as an example, he shows by an elaborate exposition how "hopeless it is to look to any other source than the government for this service." With regard to the question whether the government has any constitutional power to extend such investigations over the several States, it is urged that "from every analogy of past legislation, Congress has clearly assumed to possess the requisite authority;" that "if it can investigate agricultural industry and maintain a department to execute that branch of inquiry, it can investigate mineral industry; if it can make a coast and geodetic survey over the whole United States, it can make a geological survey." The cost of carrying on a geological survey covering the whole of the United States is estimated by the director at the same sum which is annually expended by the Coast and Geodetic Survey. The importance of the results of the collection and dissemination of such information as the geological survey would gather can scarcely be overestimated. Being now so fortunate as to have in the service of the government a corps of scientific men of signal ability and energy to undertake this important work, under a direction eminently capable to give system of action and harmony of purpose to their operations, there is but little doubt that the American people would willingly approve an expenditure small in proportion to the general benefit to be expected. I therefore earnestly commend the suggestions of the Director of the Geological Survey to the consideration of Congress.

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The payment of arrears commenced in May, 1879. There was paid in May and June of that year \$3,933,386.63, and \$19,980,808.23 during the last fiscal year. The total amount paid out for pensions during the year was \$57,026,994.12.

The number of cases in which arrears of pension have been allowed up to November 1, the date of the report, is 43,917. The average in each case is \$560.15. These cases were settled from the beginning, so as to distribute them in equal proportions throughout the country, month by month, as the work progressed.

During the 19 years from June, 1861, to July, 1880, 412,459 Army and Navy claims for invalid pension were filed, and 278,488 claims in behalf of Army and Navy widows, minor children, and dependent relatives; 168,856 of the invalids and 193,494 of the other classes were placed on the pension-rolls. Under the acts of February 14, 1871, and March 9, 1878, granting pensions on account of service in the war of 1812, 34,339 survivors presented claims, and 40,020 widows; 25,470 of the survivors and 29,898 widows have been pensioned. There were, on the 30th of June, 282,597 unsettled claims for pension of the Army and Navy classes, and 17,749 claims for pension on account of service in the war of 1812, for bounty-land warrants and for increase of pension. There were allowed during the year 14,631 original pensions of the Army and Navy classes, a larger number than has been allowed in any year since 1871. Annexed to the report is a number of valuable statistical tables, which cannot be given in full, but one of them is worthy of particular mention, showing the number of pensioners borne upon the rolls at the end of each fiscal year from 1861 to 1880, and the amount of money paid out for pensions each year. The total amount for the twenty years is \$455,718,505.70.

The Commissioner refers to the new record of claims which has been in course of preparation for many months, and now approaching completion, which classifies the claimants by their proper military organization. These records when completed will comprise 176 volumes of 250 pages each, and contain a record of the claims on account of service in 2,268 regiments, 194 battalions, 706 independent companies, 708 batteries, and 46 staff corps.

The reorganization in November last of the office force engaged in settling the Army claims for service in the war of the rebellion, with re-

arrangement of the files to correspond, has been of great advantage to the service.

The report refers to the subject of Indian pensions, on account of service in three regiments of Indian home guards, raised in the Indian Territory. In 1879 the Commissioner detailed two special agents to visit the Territory and investigate the claims upon their merits. The investigation was successful and the claimants are about to be paid their dues; a large sum of accrued pension is due in each case, which, under the law, must be paid by check issued by the pension agent. The Commissioner says that there are no banks or other financial institutions in the Territory upon which the pensioners can depend to exchange at a reasonable rate current money for their pension checks, and the pensioners are in danger of being overreached and defrauded of their pensions by unscrupulous speculators and adventurers, who infest the Indian and border settlements, unless some precaution shall be taken for their protection, and he recommends legislation to authorize the accrued pension to be paid in installments not to exceed \$200 each, as a measure of protection.

There are about 2,450 pensioners residing at the various branches of the homes for disabled volunteer soldiers, whose pensions annually amount to about \$300,000, which have been paid to the treasurer of the home and disbursed under the direction of the managers, who claim that this course is justified by the law and necessary in order to secure proper discipline and good order among the inmates. The Commissioner is of opinion that the law does not provide for the payment of these pensions in this manner, and requests that the subject be brought to the attention of Congress, so that the duties of the Commissioner of Pensions and managers of the home in relation to these pensions be more clearly defined.

Legislation to authorize the payment of the pensions to the wives and children of insane or imprisoned invalid pensioners is recommended.

The report also recommends legislation to authorize the pensions of minor children to be commenced at the date of the last payment to the widow of the soldier in cases where she has remarried and concealed the fact, and continued to draw the pension.

It also recommends legislation to enable the Commissioner to dispose more equitably of claims for increase of pension than can now be done under the law, and providing for the review of unjust rates of pension which have been established under a mistake.

The report next deals with the subject of attorneys' fees. It calls attention to the fact that since the act of June 20, 1878, there is doubt whether the penal provisions of section 4785, Revised Statutes, can be enforced against attorneys, and recommends an amendment to dispose of the doubtful construction.

It also recommends legislation to protect the department and claim-

I would also make the following recommendations:

First. That a board of three competent persons be appointed by the President to superintend the laying out and building of roads and bridges and to make plans for further improvements, and to make the necessary contracts, and to audit the accounts therefor; the members of such board to receive no salary, but to have their actual expenses allowed while engaged in the discharge of their duties; that this board be authorized to employ a competent person as custodian of the park, at a salary of — dollars, and also to organize a police force of at least ten members, to afford visitors the necessary protection and aid, to protect the craters of the geysers and basins of the hot springs from destruction and defacement, and to enforce the regulations mentioned below.

Secondly. That the Secretary of the Interior be authorized to invite the Academy of Science to designate a proper person to observe the extraordinary volcanic phenomena in the park, to analyze its waters, and to make a report thereon, a suitable compensation therefor to be fixed by this department.

In view of the fact that the destruction of game is going on in the Western country at a rapid rate; that some of the valleys of the National Park have for years been favorite places for the wholesale slaughter of elk and deer; that it would be desirable to preserve in some locality specimens of the more notable wild animals of that region, and that the Yellowstone Park appears to be a very suitable place for that purpose, I have deemed it proper, under the law authorizing the Secretary of the Interior to make regulations for the government of the park, to prohibit the hunting and killing of game in it altogether; while fishing, except with nets and seines, is to be left free. Regulations have also been made concerning the grazing of cattle on the pasture lands of the park. As the enforcement of some of these regulations will require the enactment of a law providing a penalty for their violation, a draught of a bill to that end will be submitted to the consideration of Congress.

GAS COMPANIES.

The report of the inspector of gas and meters shows that the gas companies of the District of Columbia have generally during the year furnished gas in purity and illuminating power equal to the requirements of the act of June 23, 1874.

The report of the inspector sets forth the results of experiments made in the early part of the present year to determine the quantity of light given by different burners consuming the same amount of gas, which will be of interest to the public.

The inspector suggests that the law should be so modified as to require the gas companies of the District, within a specified time, to replace all meters now in use which have not been inspected with meters which have been inspected, proved, and sealed, and, also, to require that when, for any purpose whatever, the heads of meters which have been inspected

are removed by the company to which they belong, such meters should again be inspected before being placed in service.

It is suggested that the law does not specify the person whose duty it shall be to institute proceedings to recover the penalty for failure to supply gas of the required purity and illuminating power. The law should be amended in this respect, and also should set forth more particularly the manner in which the penalty should be recovered.

Receipts and expenditures of the office :

Cash on hand July 1, 1879	\$1,057 07
Received during the year	716 36
Expended on the laboratory and apparatus.....	1,141 59
Cash on hand July 1, 1880.....	631 84

PUBLIC BUILDINGS AND GROUNDS.

The report of the Architect of the Capitol sets forth the improvements which have been made during the year in the Capitol, the Capitol grounds, the Government Printing Office, and the City Hall.

He calls attention to the fact that it was not possible to execute the act passed at the last session of Congress providing for the construction of an elevator for the south wing of the Capitol, for the reason that the proviso to this act required that it should be so located as not to interfere in anywise with the lighting and ventilation of the building, and it was found that it could not be so located as to comply with these conditions. He expresses the hope that Congress will so amend the law as to remove the restriction referred to, so that the appropriation made for the elevator can be used during the present fiscal year, there being a necessity for its construction.

The Architect recommends that the police of the Capitol grounds be attached as special police to the Metropolitan department.

He renews his recommendations that the old hall of the House of Representatives and rooms adjoining be made fire-proof.

The Electrician to the House of Representatives reports that the method of lighting the gas by the dynamo-electrical machines effects an annual saving of \$1,000 or \$1,200 over the old method of lighting by batteries. The experiments made with the electric light do not warrant him in recommending it for the legislative halls. He recommends its use in the Capitol grounds and adjoining parks.

The amount expended on the Capitol Extension for the year ending June 30, 1880, was \$50,000, the amount appropriated for this purpose.

The expenditures on account of improvement of the ventilation of the Hall of the House of Representatives were \$30,000, the amount of the appropriation.

The expenditures on account of the heating apparatus for Senate Chamber were \$4,000, the amount appropriated.

The expenditures for lighting the United States Capitol and grounds

were \$30,516.01. The appropriation was \$32,400. Balance to be returned to the Treasury, \$1,883.99.

The expenditures on account of the Capitol grounds were \$60,000, the amount of the appropriation.

The expenditures during the year on account of the extension of the Government Printing Office, which is now finished, were \$29,039.24. The amount expended during the previous year was \$14,244.57. Of the appropriation \$43,800, \$516.19 remain to be returned to the Treasury.

NEW PUBLIC BUILDINGS.

The Interior Department has in the course of time grown to be so large an institution that the Patent-Office building is altogether too small to accommodate more than one-half of its records and its clerical force. The inconveniences suffered on account of the insufficiency of room are a constant source of complaint. Only four of the eight bureaus of the Interior Department are accommodated in the building, namely, the Patent Office, the Land Office, the Indian Bureau, and the Bureau of Railroad Accounts. And even these four are so cramped for room that the halls and corridors must be used for the storing of valuable records, some of which are in daily use, and that the crowding together of the clerical force is such as not only to cause very serious discomfort but also to interfere with the transaction of the public business. Four bureaus of the Interior Department, namely, the Pension Office, the Census Office, the Bureau of Education, and the Office of the Geological Survey are located in different parts of the city, in buildings rented for that purpose. The Interior Department, inclusive of the Census Office, pays this year \$44,900 in rents. The scattering of the different bureaus constituting this department in widely separated locations causes much delay and circumstance in the correspondence between the bureau chiefs and the head of the department, which should always be easy and rapid. A large correspondence and valuable papers have to be carried to and fro for signature and inspection, and are in their transit liable to be lost or damaged. The crowding together of a large number of clerks in small rooms is dangerous to health, and sometimes seriously interferes with the performance of duty. The file rooms are so packed that we find it sometimes difficult to get at documents necessary for the prosecution of business. Almost every foot of space, not only in the halls and corridors, but under stairs and arches, and in nooks and corners from the basement to the roof of the building has had to be used for storing papers and records. We have been obliged to use even one of the new model halls recently restored for the accommodation of the copying force, putting in wooden partitions and covering the room destined for the exhibition of models with desks and office furniture. It is evident that the erection of a new edifice for the accommodation of the Interior Department will soon be recognized as an

absolute necessity. The Patent Office alone will in the course of time, with its accumulating records and models, occupy the whole of the present Interior Department building.

I am informed that similar complaints come from other departments of the government; that the Post-Office Department finds its present quarters insufficient; that a large portion of the force of the Treasury Department is located outside of the main building; that the Department of Justice is in a rented house; and that the new edifice erected for the Departments of State, War, and of the Navy will not be large enough to accommodate all the offices belonging to those branches of the public service. Under such circumstances it appears that the exigencies of the government call for the erection of not only one but of several public buildings, for the Interior Department, for the Post-Office Department, for the accommodation of the Department of Justice, and for different offices connected with the War and Navy Departments which do not find accommodation in the buildings now existing and in progress of construction.

In view of this fact I beg leave to repeat some remarks I had the honor to address to the Hon. George L. Converse, chairman of the Committee on Public Lands, House of Representatives, on the 18th of May last, in reply to a letter of inquiry from him:

If such public buildings are constructed upon a harmonious plan, they will contribute much to the public convenience, as well as to the beauty of the national capital. I would respectfully recommend, therefore, that the following suggestion be considered:

It being desirable that the executive departments should be located in as close proximity as possible to each other, as well as to the Executive Mansion, it would seem to me that no better place for the construction of new buildings for them could be found than the blocks surrounding Lafayette Square on the east, north, and west, opposite the Treasury, the Executive Mansion, and the State, War, and Navy Departments, leaving the square itself undisturbed. A group of four public buildings surrounding that square, erected upon an harmonious plan as to architecture, would, with the buildings now existing, probably become one of the most imposing and beautiful groups of public edifices in the world. The purchase of the lots surrounding Lafayette Square would indeed be somewhat costly, but the public convenience, as well as the architectural beauty of the group mentioned, would no doubt compensate for an expenditure but little larger than would be occasioned by the purchase of property in other parts of the city. These buildings could be erected one after another, as the necessities of the case may require, but a harmonious plan for the whole group should be made by competent architects and accepted by the government before commencing the erection of any one of them. I respectfully submit this suggestion to your consideration and that of Congress, believing as I do that the erection of the public buildings that are now and will become necessary, upon such a plan as here stated, will finally be more satisfactory to the people of the United States than would be the scattering of a number of public offices in places more or less accidentally chosen, and thus losing much of their architectural effect, while being but little less costly. I would add that if such a project be entertained it can be initiated and partly executed at much less expense now than will be possible ten or fifteen years hence, when its non-adoption at a time like this might possibly become a matter of very general regret.

RECONSTRUCTION OF THE INTERIOR DEPARTMENT BUILDING.

The reconstruction of that portion of the building which was destroyed by fire is, with the exception of a few minor details, completed. The amount of money appropriated by Congress for this work was \$250,000. The change of the plans originally authorized by Congress, June 20, 1878, necessitated certain expenditures which reduced the available balance to \$244,920.48. The estimate submitted of the cost of the reconstruction under the plans authorized by act of March 3, 1879, was \$250,000, and it is gratifying to state that the expenditures have not exceeded the available balance, above stated. The architect in charge estimates that \$5,915 will be required to complete the ornamentation, construction of gallery-rails, furnishing rubber plates for steps, and for other necessary work which remains to be done.

The halls are a decided improvement over the old ones, being beautiful in design and more commodious in general arrangement. The additional gallery adds one-third to the space hitherto available, while the light is better than before. Credit is due to the architects and engineer in charge, not only for the original design, but for the fidelity with which the work has been supervised.

The supervising board appointed by Congress, consisting of the Commissioner of Patents, the Architect of the Capitol, and the Engineer in charge of public buildings, is entitled to no less credit for keeping the expenditures within the appropriation, and for the general management of the work.

The south and east halls are at present in a very insecure condition. Faulty construction has developed defects in the arches, which may prove of a serious character unless promptly remedied. In my last report I called attention to the insecure roof which now covers these two wings. It is little better than a tinder-box, and covering imperfect and badly constructed flues, may at any time endanger the safety of the building. The changes necessary to construct a fire-proof roof, and remedy the evils growing out of a faulty plan, would be so radical and expensive that I deem it in the interest of public economy to recommend the reconstruction of both wings on the plan adopted in the rebuilding of the north and west halls.

The sum of \$90,000 has been asked for to carry out this plan on the south wing, and I earnestly hope that Congress may deem it advisable to appropriate the amount.

The walls and ceilings of the halls and rooms immediately under the reconstructed model-halls were seriously damaged by heat and water at the time of the fire.

The estimated cost for the necessary repairs is \$10,000, and an appropriation of this amount is recommended.

An appropriation of \$80,000 was made at the last session of Congress, to be used in fitting up the model-halls with fire-proof cases. Contracts

have been entered into for the construction of as many as can be obtained for the amount named. As the original estimate for this purpose was \$160,000, an additional sum of \$80,000 will be needed to supply both halls with the number of cases required.

HOSPITAL FOR THE INSANE.

The number of patients in the hospital June 30, 1879, was 819, of whom 617 were males and 202 females.

The number admitted during the year was 225, of whom 181 were males and 44 females. The number discharged as having recovered was 52, improved 33, unimproved 3; 46 males and 13 females died.

The number remaining in the hospital June 30, 1880, was 897, of whom 691 were males and 206 females. Of those under treatment during the year, 529 were from the Army, 53 from the Navy, 462 from civil life.

The report of the Board of Visitors gives a synopsis of the operations of the hospital during the whole period of its existence.

The records show that of the 4,940 cases treated in the hospital during the twenty-five years of its existence, 2,095 recovered.

The estimates for the next fiscal year are as follows:

For the support, clothing, and treatment of the insane	\$196,875
For general repairs and improvements	10,080
For special improvements	40,000

One purpose for which the last-mentioned appropriation is asked is to furnish the hospital with a supply of pure water. The hospital has hitherto been supplied with water from the Anacostia River, immediately in front of the hospital grounds. It evidently contains impurities rendering it unfit for use, and these impurities will increase year by year. It is estimated that \$25,000 will be required to connect the hospital with the water supply of the city of Washington.

In my opinion this improvement should be made without delay.

The hospital farm has not sufficient accommodations for the shelter of stock and the proper protection of the harvested crops.

An appropriation of \$5,000 is asked for additional farm buildings. I recommend that this appropriation be made.

The Board of Visitors also recommend the erection of a suitable mortuary building, a greenhouse, and a kitchen detached from the main building. I concur in these recommendations, and also in the recommendation that provision be made for the erection of a distinct hospital building for the female insane, to cost \$250,000, to be completed in three years, and that the sum of \$75,000 be appropriated for this purpose for the year ending June 30, 1882.

The sum of \$143,000 was appropriated for the support of patients during the present fiscal year. It is estimated that \$175,000 will be required for this purpose, and that an additional sum of \$5,000 will be required for ordinary repairs and improvement to keep the property

from deterioration. The board asks for a deficiency appropriation of \$37,000.

The detailed statement of the receipts and expenditures of the hospital for the last fiscal year, required by the act of June 4, 1880, is attached to the report of the board.

COLUMBIA INSTITUTION FOR THE DEAF AND DUMB.

The number of pupils under instruction during the year was 128. Of these 79 were in the collegiate department, representing twenty-four States and the District of Columbia, and 49 were in the primary department.

The general health of the pupils has been good, and but one death has occurred.

Instruction in articulation has been continued with increasing success.

A diploma and silver medal were received from the Paris Universal Exposition of 1878, in recognition of the remarkable advance made by the collegiate department.

The president of the institution visited Europe during the summer for the purpose of attending an international convention of instructors of the deaf and dumb, held in Milan, Italy, early in September.

The receipts of the institution amounted to \$53,522.06, and the expenditures to \$52,290.37, of which \$29,444.48 were for salaries and wages.

The estimates for next year are for current expenses and repairs \$53,500, the same amount as that appropriated for the present year; and \$15,242.07 for the completion of the gymnasium, the erection of a barn, cow-houses, etc., and for the improvement and inclosure of the grounds.

Congress at its last session made provision for the care and education of the feeble-minded children belonging to the District of Columbia, the expenses of the same to be defrayed out of the appropriation for the support of the Institution for the Deaf and Dumb. One applicant has been placed in the Pennsylvania Training School for Feeble-minded Children, at Media, near Philadelphia.

Twenty blind children belonging to the District of Columbia have been under instruction the past year in the Maryland Institution for the Blind, at Baltimore, as beneficiaries of the United States.

FREEDMAN'S HOSPITAL.

The whole number of patients in the hospital during the year was 1,119. The number in the hospital June 30, 1879, was 217: the number admitted during the year was 902: 139 died: 752 were discharged, leaving 228 in the hospital at the close of the last fiscal year. About two-thirds of the patients were colored persons.

Of those who were discharged, 585 are reported cured.

A dispensary has been carried on in connection with the hospital,

upon the books of which for the year are borne the names of 1,949 patients.

This hospital subserves an urgent need of this community, and the continuance of provision for it is commended to the attention of Congress.

The expense of the support and medical treatment of each patient in this hospital is about fifty cents a day.

TERRITORIES.

UTAH.

The governor of Utah reports a falling off in the number of agricultural claims initiated in the Territory as compared with the preceding year.

The number of mineral applications has largely increased, more than doubling that of any previous year, and the number of mineral entries exceeds that of the preceding year by about 24 per cent.

The number of cattle is about 200,000, while there have been driven from the Territory during the year not less than 50,000, at an average price of \$15.50 per head. The number of sheep is fully 500,000, with a yield of about 2,000,000 pounds of wool, disposed of at about 20 cents per pound. To prevent a decrease in the business of stock raising, the governor favors legislation which will allow stock-raisers to obtain rights other than those given by common consent and by existing law.

Notwithstanding the drought during the summer of 1879, the yield of the cereals proved to be an average one.

The crops of 1880 have, however, been somewhat injured by the dearth of water during the summer of 1879, followed by a severe and prolonged winter. Dry farming has greatly increased by reason of the rapidly increasing population and the cost and difficulty in constructing irrigating canals.

While this is true, the area reached by irrigating canals is yearly being increased, and much land hitherto untilled is by means of irrigation being brought under cultivation and dotted with farm-houses. The population of the Territory is 145,000, showing an increase of 60 per cent. over that of ten years ago. About one-half of this increase has been drawn by the mines of the Territory. The remaining half has been the result of natural increase by birth, together with the proselyting work of the missionaries sent out by the Mormon Church.

The governor believes that the mines of Utah will prove among the richest and most productive of any in the West.

Responsible mining men are reducing mining enterprises to a practical business basis, and many good mining districts heretofore inaccessible are now by railroads brought into close connection with the markets, and much of the ore, which on account of its low grade was unprofitable, has now by the superior methods of reducing and extracting become

profitable and is being worked. The estimated product of the mines of the Territory up to the end of 1875 was \$21,000,000; since January, 1876, it has been, in round numbers, \$24,000,000, or \$6,000,000 yearly, made up of gold, silver, lead, and copper. Silver takes precedence, considerably more than half the value named being in that metal. Lead ranks second, and copper the lowest in the value of its production.

The number of miles of railroad opened during the past year is reported at 792, which tends to show the rapidly developing business interests of the Territory.

The relations with the Indians are reported as in general satisfactory, many of them having abandoned their tribal relations and engaged in farming and stock-raising.

The conduct of those at the Uintah Agency during the White River troubles has been specially commended by the agent at that place.

The governor in his report dwells at length on the social condition of the Territory as resulting from the teachings of "the Church of the Latter-Day Saints," and invites attention to the constant violation of law in the practice of polygamy. With a law of Congress forbidding polygamy and prescribing penalties, which law has by the Supreme Court of the United States been adjudged constitutional, the practice has been and continues to be tolerated in the Territory, though elsewhere in the country it would speedily meet the punishment prescribed.

Polygamy is not only tolerated in Utah, but, because of the power and influence of the organization in which it is practiced, it is made the shibboleth to position and power. Besides being in direct violation of law, it tends toward a union of church and state too intimate to accord with the spirit of our institutions.

The governor urges that time will not prove the remedy for the evil, which can be reached and averted only by a rigid execution of the laws.

The enactment of additional laws to secure the enforcement of the act approved July 1, 1862, to prevent and punish the practice of polygamy in the Territories of the United States and other places, is earnestly commended to the attention of Congress.

WYOMING.

The governor reports a steady advance of the Territory in population and wealth. Grazing, to which the country is well adapted, is the foremost interest. The number of cattle in the Territory is estimated at 540,000, and of sheep at 375,000.

Owing to the lack of confidence in the possibility of successful agriculture at so great an elevation as 5,000 to 7,000 feet above the level of the sea, this industry advances but slowly. In some portions of the Territory fine crops have been produced without irrigation. This, however, can be expected only in the more favorable seasons, but with a

proper supply of water there are millions of acres which can be cultivated with a certainty of liberal profits.

The governor suggests that some provisions of the existing timber laws of the United States are embarrassing to the people and a great hinderance to the improvement of the Territory, and that while the interests of the future demand that the forests on the public domain should be protected, something should be done in the interests of those engaged in opening up the new portions of the country. He suggests that the laws relating to timber and timber lands be so modified as—

1st. To insure to settlers, wherever their numbers are sufficient to warrant the survey, the opportunity to purchase timber lands in small tracts and at fair prices, graded and classified within fixed maxima and minima according to relative value.

2d. To allow, in districts where surveys have not been made and lands cannot be purchased, the cutting of necessary timber, at moderate rates for stumpage and under proper regulations, for other than the personal use of those cutting it, that is, for the purchase and use within the Territory of any resident thereof, or of any person or corporation non-resident, yet engaged in making improvements therein.

3d. To prohibit, under any circumstances or conditions, the cutting or removing or the causing to be cut or removed from the public lands of this region, any *green* timber, of whatever size, where sound, dead timber, falling or standing, and suitable for the purpose, can be had.

4th. To grant the freest possible use of any fallen timber wherever found.

5th. To afford yet greater security against forest fires by enactment of more stringent laws, with severe penalties against carelessness in the kindling of fires and against the neglect to extinguish fires already kindled which have served their lawful purpose. The governor remarks that while much destruction of timber on the public lands has resulted from the cupidity and reckless waste of persons using and speculating on the products of our forests, all these depredations combined have been as nothing compared with the waste by fires.

The governor remarks that the surveys of the public lands lag behind the public demand, and expresses the hope that Congress will remove a source of embarrassment to the people by making more liberal provisions for their survey. He also urges that the existing laws of the United States relative to the disposal of the public lands are not suited to the requirements of the territory, for the reason that they do not provide against a monopoly of the water-courses by the few who locate upon the borders of the streams. The necessity for irrigating the soil to make it productive seems to require that some system for disposing of the public lands should be devised by which the water of the streams can be made available to those who may desire to cultivate lands by irrigation. Under the present system the whole Territory will, in time, vir-

tually be in the possession of those few persons who may own strips of land along the streams.

Attention is also called to the present faulty constitution of the Territorial courts, and the lack of proper definiteness in relation to their powers and the manner of their exercise. These courts are anomalous in character, and there appears never to have been a proper consideration of the peculiar circumstances and conditions under which they must act. The method of compelling the attendance of jurors and witnesses, of empaneling juries, the suitable compensation of marshals required to travel in pursuit of witnesses, jurors, and criminals, over great distances, as well as the present embarrassment attendant upon bringing witnesses from remote parts of the country, all these, with yet others, are matters concerning which the laws are faulty. The courts are of a mixed or twofold character, being at once Territorial and Federal. The organic acts of this Territory and of others declare that "the jurisdiction of the several courts herein provided for, both appellate and original, * * shall be as limited by law." The law, as said before, is not only wanting in definiteness on this subject, leaving the courts oftentimes in doubt on the question of how to proceed in Federal cases, but is so far wanting as to leave the courts to such inconvenient and embarrassing use as they may find it possible to make of the Territorial law and its machinery. In fact what is wanted is not so much definiteness in the matter of jurisdiction *as a procedure, fixed by law of Congress, in accordance with which the Territorial courts may proceed when exercising the jurisdiction of circuit and district courts of the United States.*

It is also suggested whether some better system should not be provided for determining cases on appeal from the district courts of the Territories. Under the present system one of the three judges who form the court of appeal is the person from whose judgment the appeal is taken. A court so constituted does not seem to supply the place of a supreme court.

A revision of all the laws relating to the Territories, with a view to secure greater harmony, consistency, and adaptation to the existing condition of affairs is recommended.

DAKOTA.

The governor reports a rapid extension of railroads in the Territory, and that prosperous towns are springing up upon all the lines of travel. The Northern Pacific Railroad Company has four hundred miles of road in operation in Dakota at present, and it is expected that it will be completed to the western line of the Territory during this year.

The governor estimates the white population of the Territory at the close of the fall of the present year at 150,000.

Advance in the development of the mining resources of the Territory is reported, and the opinion is given that the Black Hills will yield large quantities of gold and silver for generations to come.

The governor alludes to the great destruction of timber in the pine forests around the Black Hills by fires started during the dry season either by carelessness or with criminal intent, and recommends that measures be taken for the protection of the government timber, and that an agent be appointed to sell the same for mining and building purposes. He suggests that a small sum expended in protecting the timber will save millions of feet annually, and that unless something is done to this end mining operations will soon be checked by scarcity of timber. He also suggests that the laws now in force are not adequate for the protection of the sections donated by Congress for educational purposes.

The Territory of Dakota having no penitentiary, it has been necessary to transport its convicts to Detroit, Mich., for imprisonment at an expense of nearly \$10,000 yearly to the people of the Territory. It is estimated that \$40,000 will build a penitentiary of sufficient capacity for the present requirement of the Territory. The penitentiaries in other Territories have been built at the expense of the general government, and the propriety of making an appropriation for the building of one in Dakota is submitted for the consideration of Congress.

The financial condition of the Territory has improved so that it is expected that at the close of the present year it will be free from debt.

IDAHO.

The governor of Idaho reports that about one-third of the 55,000,000 acres in the Territory may be considered suitable for agriculture and grazing, besides about one-fifth which might be reclaimed by irrigation. About one-sixth of the Territory is timber land, one-eighth mineral lands, and the balance is mostly arid, being destitute of mineral, timber, or vegetation of any kind.

The soil is generally sandy, with an intermixture of loam in the valleys. In its varied and beautiful scenery, Idaho is perhaps unsurpassed by any State or Territory in the country. Among the wonders in natural scenery may be mentioned the great Shoshone Falls of Snake River, one of the greatest cataracts in the world, equal in height and volume to Niagara.

About one-third of the population are engaged in farming and stock-raising. The past year has been a remunerative one to farmers; good crops have been raised, and good prices have been obtained therefor. Only in the northwestern portion of the Territory is the rainfall during the growing season sufficient, however, to insure good crops without irrigation. The governor states that when sufficient moisture is had, either from rains or irrigation, the yield of all kinds of grain (except corn) and of vegetables is unsurpassed in quantity and quality. Wheat, he states, yields readily an average of 40 bushels per acre. Oats average 60 to 70 bushels, and barley 30 to 40 bushels.

Timothy and clover hay of good quality and large growth are produced; fruit trees and vines grow rapidly and produce abundantly.

The extension of the lines of government survey in certain portions of the Territory is urged, as immigrants are slow to settle upon and improve lands, however desirable, to which they cannot initiate claims under the pre-emption or homestead laws.

Stock raising is becoming one of the considerable industries of the Territory, attention being turned chiefly to cattle, though the climate and soil are well adapted to sheep and wool growing. It is estimated that not less than 40,000 head of cattle have, during the past season, been sold and driven from the Territory, at an average of about \$12.50 per head.

The mineral resources of the Territory constitute its chief interest, and the one upon which all other interests largely depend.

Gold and silver in paying quantities were discovered within its limits as long ago as 1852, ten years prior to the formation of the Territory, but the mines were, to some extent, abandoned for those more recently discovered in localities where prospecting and mining could be carried on with less danger from hostile Indians. More recently, however, this danger having been removed, important discoveries have been made, and the industry has revived until now there is scarcely a county in the Territory that does not contain one or more mining camps or towns.

In addition to gold, silver, lead, copper, and other metals and ores, coal beds and rich deposits of fire and pottery clay of the finest quality have been found. Since the discovery of gold and silver in the Territory its mines have contributed to the material wealth of the country not less than \$75,000,000.

The relations with the Indians have, during the past year, been very satisfactory. There have been no disturbances, and no depredations have been committed by them, the people having enjoyed unusual security, even in the localities most exposed to danger. Although since the Nez Percé and Bannock wars the reservation Indians have remained more generally upon their reservations, yet large parties of them almost constantly roam over the Territory hunting, fishing, and begging. The visits of these roaming parties naturally tend to create a feeling of uneasiness in the minds of the settlers, especially in remote and isolated settlements.

The feeling of insecurity thus caused is liable to result in the organization of the settlers to drive the Indians away, and from such collisions often commence bloody and devastating Indian wars.

Another question presents itself for consideration. Long before the Fort Hall Reservation was set apart for the Bannock Indians there were numerous settlers upon portions of the territory selected who still remain within the bounds of the reservation, which fact is liable to cause trouble. The governor suggests that these settlers should be paid for

their improvements and removed, or stipulation should be made with the Indians by which that portion of the reservation settled by the whites may be ceded to the government. There is ample room on the reservation to admit of the latter course, and he thinks the Indians would readily consent, upon reasonable terms, to such a plan. He also believes that many of the Indians, especially of the Nez Percés, many of whom are now thrifty farmers, could be prevailed upon without difficulty to select lands in severalty. Could this be accomplished a large portion of the Nez Percé Reservation, which embraces an extended area of valuable agricultural land, might be restored to the public domain.

The greater portion of the timber in the Territory is in the mountains, and consists principally of pine, fir, and cedar, though it is found to some extent along the rivers and smaller streams.

To prevent the destruction of timber in violation of law, the governor recommends the amending of the act of Congress of June 3, 1878, so as to provide for the survey and sale of the timber on the public lands, say every alternate section, with a heavy penalty for cutting or destroying the timber on the sections reserved by the government. This would supply the people and create an interest which it is thought would prevent the wanton destruction of timber.

The population has increased from 20,588, in 1870, to about 40,000, including Indians, in 1880, a gain of nearly 100 per cent.

With the opening up of railroads, it is reasonable to expect a much larger gain in the next decade. There is at present but one railroad into the Territory—the Utah and Northern, a narrow gauge, running through the eastern part, though other lines have been projected, the most important of which is one to run from Ogden, Utah, to some point on the Pacific coast in the State of Oregon. Though lacking in railroad facilities, the Territory is well provided with first-class stage routes to all the important points. As before suggested, much of the land in Idaho, suitable for agriculture, cannot be made available except by irrigation, and development in this way will be very slow so long as individuals are so restricted in the amount of land which they can enter. Under existing laws individual interests cannot be large enough to warrant irrigation on any very large scale. The propriety of so amending the desert land laws as to permit the disposal of this class of lands in large quantities to persons or corporations pledging themselves to the building of canals for their reclamation, and restricting them as to withdrawal of the lands from the market and as to the maximum price at which they should be sold, is suggested.

The number of children between the ages of five and twenty-one is about 6,000, and the annual revenues raised for school purposes is about \$25,000. The necessity for making some provision in the interest of public schools in the Territories is urged upon Congress.

It may be said in general of the Territory that its affairs are in a highly satisfactory condition. Good health has prevailed during the

year. Agriculture, stock raising, and mining have prospered. Crime is not more common than in older communities in the East, and, with one exception, infractions of the law meet with as sure and speedy punishment. The one exception is the utter failure or inability of the officers of the law in certain counties to punish violations of the law of July 1, 1862, against polygamy. Further legislation is earnestly recommended looking to the effectual suppression of this vice, which, under the guise of religion, is spreading throughout these Territories in violation of law and in direct opposition to the moral sense of the people of the country.

OFFICIAL SALARIES.

In the estimates of expenditures for the next fiscal year I have recommended an increase in the salaries of various officers and clerks in this Department, and in the report of the Commissioner of the General Land Office, presented herewith, there will be found an elaborate and instructive letter addressed to me by that officer upon this subject. There is no doubt in my mind after the experience of nearly four years in the conduct of this Department, that the pay allowed to almost all the higher grades of its officers and clerks is entirely out of proportion to the ability required in the discharge of their duties, the labor exacted, and the great responsibility borne by them. The duties performed by the Assistant Secretary of the Interior are such that I see no reason why his salary should be less than those of the Assistant Secretaries of the Treasury. I am, on the contrary, of the opinion that all the assistant secretaries are underpaid. The public interest demands that those places be filled by men who in the absence of the respective Secretaries may be trusted temporarily to perform their duties and to discharge their responsibilities. Their compensation should be at least equal to that of the Comptrollers of the Treasury.

The office of Commissioner of Indian Affairs is one of the most arduous places in the government, devolving upon him probably more work and responsibility than falls to the lot of any bureau chief in any of the executive departments. Of the Commissioner of the General Land Office and of the Commissioner of Pensions almost the same can be said. These positions require great knowledge of affairs and more than ordinary executive ability. The Commissioner of Patents is a little more favored in point of salary; but, considering the cost of living here, I do not think that in any great government in the world officers of the same rank, discharging the same high order of duties, and bearing the same responsibilities, are as badly paid in proportion. Not one of them should, in my opinion, have less than \$5,000 a year. If the American people desire that the public business be well done, and that the high places of the government be filled with men of corresponding character and ability, the salaries ought to be such as to command what is required in that respect. Most of the division chiefs in the General Land Office, such as the chiefs of the Mineral Division, the Division of Private

